COMMUNITIES OF PRACTICE: LEARNING IN PROGRESSIVE ENSEMBLES

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ABSTRACT

This study examines the learning of ensemble skills by young musicians in progressive ensembles. Data collection took place in three music centres which form part of an LEA music service's ensemble provision. This study uniquely approaches ensembles as 'socio-musical' phenomena. It finds description and explanation in the constantly changing and developing socio-musical interactions that form ensembles. Using an ethnographic approach it examines the practice of ensembles that are part of musical learning pyramids, through the eyes and actions of the ensemble members. There is an examination of ensemble membership and the social structures and interactions that form ensembles.

This study explores, and for the first time identifies, a set of ensemble specific skills. These are the skills that a musician uses to negotiate, integrate and cooperate with other participants in the production of ensemble performance. It goes on to examine how ensemble specific skills are acquired and suggests that the learning process is one of serial performative responsibility transfer created within stratified centripetal progression. New, or novice, members of an ensemble start by participating at a peripheral level leaving it to others to take performative responsibility for the production of a negotiated collaborative realization of the musical intentions of the composer.

This study has been influenced by the work of Lave and Wenger and social theories of learning. However, it departs from these theories by suggesting that the learning process within an ensemble is responsibility led and stratified.

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Chapter One

BACKGROUND

The underlying tenets of teaching musical skills, in the classical Western tradition, have remained largely unchallenged for many years. Instrumental skills are taught and learnt in an instrumental lesson in which 'master practitioners' pass skills onto their students. The knowledge acquired during the intense period of learning that is the instrumental lesson is reinforced by periods of individual practice between lessons. These skills are then applied in performance, either solo or in ensembles. The ability to participate in an ensemble is nurtured by participation in beginner and junior ensembles that allow developing musicians the opportunity to use their instrumental skills to play with other musicians in a supportive environment. This view of musical learning sees ensemble playing as an activity in which instrumental skills are applied.

These assumptions about the nature of musical knowledge and learning have informed the structuring of instrumental teaching, particularly in the maintained education sector. Local education authorities have predominantly chosen to locate instrumental teaching provision within an LEA music service. The majority of these music services have built their provision around two points of contact with the

instrumental student; the instrumental lesson and progressive ensembles provided in music centres and central music schools. Skills are learnt in the instrumental lesson and then applied in an ensemble.

It is the intention here to explore and challenge these assumptions about the nature of the skills used in ensemble playing and the process by which these skills are acquired. It will be posited that the skills of ensemble playing are specific and separate from those required to play a musical instrument. It is also the intention to explore the social nature of ensembles and the musical interactions on which they are dependent. This study focuses on the opportunities to learn ensemble skills provided by LEA music services, particularly in the progressive ensembles, which are typically seen in music centres.

There has been little research into ensembles. Some writers have suggested that this is because ensembles in education are problematic (Humphreys et al., 1992:651) as they have no clear aims and their product in not easily quantified. This study does not explore ensemble outcomes but rather uses an ethnographic approach to investigate the musical and social interactions, culture and practice of ensembles, and the musical learning pyramids in which many young people acquire and develop ensemble skills, in order to understand the specific skills that are used to create ensemble performance.

Music Service Provision

This study is set in an LEA music service and examines learning in its ensemble provision. LEA music services provide a range of music support activities to schools in their authority, the majority adopting a 'two point of contact' approach to instrumental teaching and learning. However, no two music services are structured the same or offer the same range of activities.

Sharp (1991:1-2) identified some of the different ways in which music services contribute to work in schools, with individual children and the 'cultural life of the wider community'. She identified five main categories of music service provision: Services to *primary schools* and *secondary schools*, these included instrumental tuition, workshops, in-service training (INSET) for school staff, performances by instrumental teaching staff ensembles, support for the curriculum and a general contribution to the musical life of the school. *Music centres* providing opportunities for group music making, advanced tuition for individuals and groups, music libraries, the loan of instruments, facilities for practice, specialist music courses, provision for pre-school aged children and adults and social enjoyment and interest. *Youth bands and orchestras* that perform to a high standard and draw their membership from across the authority and finally, *special provision*, including tuition for 'non-Western' music and for children with special educational needs.

Sharp's summary is probably a fair reflection of the various forms of provision offered nationally, however, few if any individual music service will offer all these

activities, most will provide some services in most categories. While it is difficult to generalise about overall provision, Sharp identifies two core areas of activity common to the majority of music services. These are instrumental teaching in schools and the provision of music centres. These music centres may offer many and various activities to support and extend music in schools (see figure 1.1). However, all music centres provide the opportunity for young musicians to play in ensembles, bands and orchestras providing, along with the instrumental lesson, either in school or music centre, the 'two points of contact' identified earlier.

Figure 1.1

Music centre activities provided by English and Welsh LEAs in 1986/87 and 1990/91

Activity	LEAs providing the activity % in 1986/87	%1990/91
Ensembles, bands & orchestras	100	100
Group tuition	73	73
Choirs	52	68
Theory	59	66
Aural	51	66
Individual tuition	66	65
Musicianship	50	59
Composition/improvisation	29	34
Other activities	19	22
Total number of LEAS	**90**	**92**

(Adapted from Sharp 1991:52)

These 'two points of contact' contrast in setting and teaching and learning approaches. Instrumental teaching is largely delivered 'in-school', while bands and orchestras are generally organized 'out-of-school'. Instrumental lessons are generally organized during the school day and the pupils are taught as individuals

or in small groups. On the other hand, bands and orchestras are organized outside of the school day and the learning is situated within the participatory and interactive practice of music at music centres.

It could be perceived that the instrumental lesson is the setting in which technical skills are learnt and the progressive ensemble is the setting in which ensemble skills are acquired. However, these two areas of skill development are not easily separated and are often addressed, seemingly simultaneously, in both settings. Musical and ensemble issues are addressed as part of the instrumental lesson and technical issues are addressed as part of a progressive ensemble rehearsal. The differences between these two learning environments may be found in the foci of each activity. The underlying purpose of the instrumental lesson could be perceived as the development of the individual, while the underlying purpose of the ensemble could be perceived as the creation of ensemble performance. That is not to say that the instrumental lesson is not concerned with performance or that the progressive ensemble rehearsal is not concerned with the development of the individual, but rather that the instrumental lesson views musicality and performance from the perspective of the individual while the progressive ensemble rehearsal approaches these self same issues from the perspective of the ensemble.

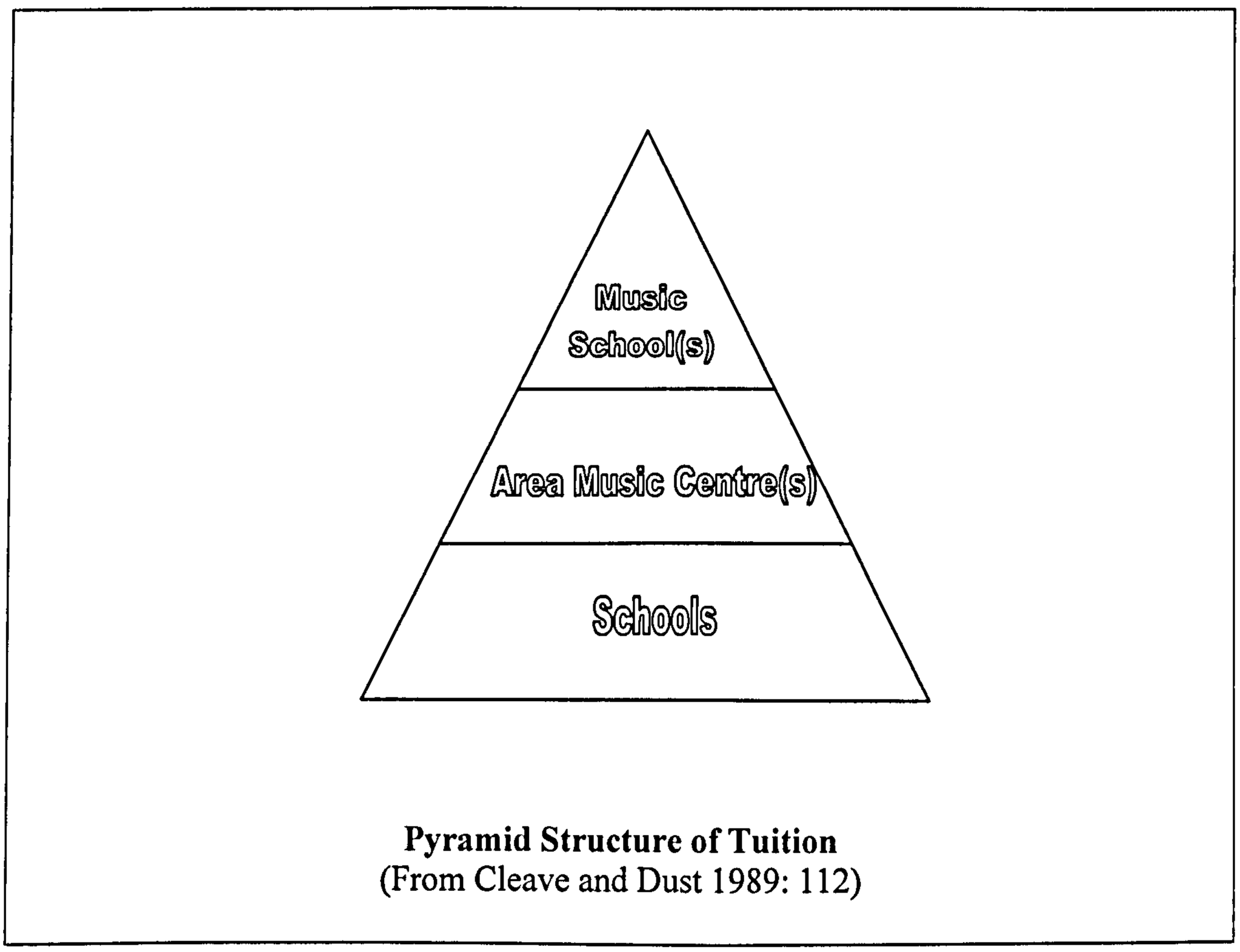
Musical Learning Pyramid

In their survey of instrumental music services undertaken in 1986/87 Cleave and Dust (1989:11) observed that musical tuition and ensemble provision was

usually provided in a 'pyramid structure' (see figure 1.2). The base of the pyramid is the instrumental work in schools where pupils 'usually receive between 20 and 40 minutes basic group tuition a week' (ibid 113). As the young musicians' progress Cleave and Dust describe how this 'basic' level of provision can be supplemented by music centres where:

> 'A varied programme of music centre activities can provide the instrumental pupil with access to specialist tuition, classes in theory, aural and general musicianship and perhaps most importantly, the opportunity to meet with other pupils of a similar ability to play in orchestras, bands and ensembles'.
>
> (Cleave and Dust 1989:113)

Figure 1.2



Pyramid Structure of Tuition
(From Cleave and Dust 1989: 112)

The top of the pyramid usually consists of a 'music school' which 'recruits pupils from across the LEA' with several authorities in their survey describing the music school as being 'aimed specifically at the talented' with entry 'often by audition' (ibid 112). Each level of the pyramid offers higher level opportunities for tuition and ensembles. While various levels of the pyramid are not the same in all music services the principle of offering a broad based provision at the bottom rising to provision for the more talented and higher achieving pupils at the top was common to all services. The young instrumentalist joins at the bottom of the learning pyramid as a novice and, over time, progresses from elementary, through intermediate to advanced ensembles.

Individual ensembles that form part of a musical learning pyramid are graded, grouping pupils by instrument, by level of achievement and often also by age. Music is carefully selected by ensemble leaders to reflect the standard of the ensemble. There is a large amount of published graded ensemble material available for most recognised instrumental combinations. Ensembles, particularly those of an elementary or intermediate standard, often have imbalanced instrumentation reflecting the distribution of instruments learnt rather than the normal or expected instrumentation of a particular ensemble. Most graded ensemble music of an elementary or intermediate level is orchestrated in such a fashion as to enable satisfactory performance regardless of instrumental balance. Graded ensemble music has to reflect the technical, physical and emotional limitations of the young

musicians who will be performing it. The technical, physical and emotional demands of the music can increase as it is orchestrated for higher-level ensembles.

Music centres operate on weekday evenings and Saturday mornings. They are rarely contained in one building and most are actually comprised of a group of 'sub' or 'satellite' centres, with each sub-centre serving a particular locality and providing opportunities for pupils to play in area ensembles. Very few music centres are in purpose built accommodation. It is common for music centre ensembles to rehearse in school buildings, as schools often provide the only accommodation suitable for rehearsing large bands, orchestras and choirs. A music centre has been described as 'being like a family' (Cleave and Dust 1989:109). Young musicians who are part of the centre have 'the support and encouragement of an external family of like minded peers and specialist instrumental staff'. As has already been stated, the range of activities offered at a music centre varies from LEA to LEA and between individual music centres. However, the core activity common to all centres is the provision of developmental instrumental ensembles. The purpose of music centre ensembles is to develop the performance and ensemble skills of the young instrumentalists.

Despite the assertion that music centre ensembles are developmental, the use of the word 'development' is problematic when applied to instrumental ensembles and ensemble specific skills. The desire of the education profession, parents, schools, music service management and the pupils themselves to 'see' progress may place an emphasis on outcomes that demonstrate progress. For example, it could be

conjectured that an increase in musical range or the ability to play in another key is eminently more demonstrable than the development of subtleties of phrasing, interpretation, understanding and collaboration. Indeed, the musically and socially interactive nature of ensemble specific skills may not allow for the incremental assessment of the acquisition of such knowledge and therefore, 'development' will need to be viewed as a more complex concept that can only be observed in broader terms.

Technique and Ensemble Skills

Music making is a participatory performance activity, but before an individual can begin to participate in musical performance they need to acquire a musical voice – to sing or play a musical instrument. As already discussed the teaching and learning of the two elements required to develop the young instrumentalist, technique and musical skills, are at their most intense in the two learning environments of the instrumental lesson and progressive ensemble. The skills required to achieve a musical voice are not, in themselves musical, they consist of the motor and technical skills required to control and master the voice or chosen instrument. The skills required to use a musical voice in participatory musical performance are more difficult to define.

The need to develop technical and musical skills together in a complimentary way has been highlighted by other writers. Persson (1994:236) discusses the balance between technical and musical input into instrumental lessons observed at a tertiary

level. He suggests that 'control before shape' (technique before musicianship) only appears to be a successful strategy if 'used in addition to allowing the student to hear and feel whole musical contexts'. Larger sections of the music are often not pieced together until these small segments are mastered. He conjectures that playing larger sections, albeit with faults, must be allowed if students are to experience and understand the larger musical structure.

Musicianship is a broader concept and less clearly defined than that of 'ensemble specific skills', and therefore, the two are not interchangeable. Indeed, ensemble skills are often subsumed in the wider term 'musicianship'. However, it could be conceived that elements of Persson's wider musicianship are, particularly for the less experienced player, addressed more satisfactorily in an ensemble setting. The problem the teacher encounters when teaching novice or school aged musicians, rather than tertiary level music students, is that the technical skill level is often low. This means that pupils are often unable to play in a fluent manner, or simply lack the required muscular strength, and are therefore often incapable of playing passages long enough to require shaping. Even when technical skills have advanced to a level at which a limited register of notes can be produced accurately and consistently the technical control required to vary the articulation, decay, tone and dynamic of each note is not advanced sufficiently to allow for meaningful musicianship to be developed. Therefore, the developmental ensemble may provide the first real opportunity for the young musician to experience extended musical participation.

Ensemble Specific Skills

Ensemble specific skills are complex and difficult to define and understand. They are the skills that combine various musical lines and sounds into something meaningful and capable of demanding an emotional response from the listener. The acquisition of ensemble skills is far more complex than learning technical skills. Ensemble skills cannot be learnt in abstraction from participation in music making. Ensemble, and the skills required to participate in it, are not the sole preserve of formalised bands and orchestras. The application of these skills can be found in any setting in which musicians play together. What is specific to bands and orchestras is the number of individual musicians involved in the creation of the musical performance and the constraints provided by the history of the ensemble type and its orchestration. A young musician's participation in this particular type of ensemble playing is often developed by progression up a learning pyramid. For pupils to progress up the pyramid the ensemble must facilitate learning. However, the environment and structure of a progressive ensemble rehearsal is very different from the learning environment and structures commonly associated with schools and other institutions or indeed those of an instrumental music lesson. A progressive ensemble provides situated learning in which traditional teaching and learning methods are not apparent. Although each ensemble is part of a progressive structure there appears to be little structure to the learning within each ensemble. Yet for pupils to progress up the ladder they need to absorb certain skills of ensemble and the social organisation of participatory music making.

Other Settings

Progressive ensembles can be observed in other settings such as schools, colleges and universities. Indeed the developmental nature of ensemble work, as part of the learning process, can be observed within an individual ensemble. For example within a church choir or a brass band, where given a 'gradual progression in skill and accomplishment ..... someone might move from the back desk to a soloist position' (Sloboda 1999:450-455). On joining such an ensemble the newcomer often plays a minor or peripheral role. The newcomer soon begins to take an increasingly central role in the ensemble as their competence and confidence increases. The musical learning pyramid structures the gradual acquisition of skills and the increasing accomplishment that facilitates the transition of the newcomer from a peripheral to central contributor, by providing a stepped progression in ensemble and performance skills.

It could be conjectured that a musical learning pyramid amplifies the developmental progression or centric motion observed by Sloboda by organising different ensembles to meet the differing needs of the individual and grouping them with others at the same development stage. This process appears to heighten and speed up the skill acquisition element of the experience, by offering more structure and guidance to the novice than would be experienced within a mixed ability ensemble.

The Setting

The ensembles that formed this study were in music centres organised and operated by a music service in a metropolitan authority in the north of England. The authority includes areas of moorland, agriculture, several towns of various sizes and a large city. The area's wealth had been built on the wool trade, and with the decline of the mills came a decline in the area's fortunes. However, new high-tech businesses are moving into the area and there are signs of regeneration and growing confidence. The authority is very diverse both in terms of population and wealth. It contrasts some very disadvantaged inner city areas with some very affluent conurbations. The authority has a large Pakistani community that mainly originates from one area in Pakistan. The ethnic Pakistani population is centred in the inner city and in one of the large towns in the authority. The music centres in the study are each in different and contrasting parts of the Authority, one in a small town with a strong brass band tradition, one in a large town with a strong sense of identity and its own traditions and the third is in the inner city close to the city's university.

The area has a long, vibrant and diverse musical tradition but organised music making as part of schools and education had been in decline for several years, the result of continuous budget cuts and uncertainty over the music service's future. This decline had led to a reduction in membership of music centres and this in turn had lead to a reduced number of ensembles provided by each centre. However, eighteen months prior to the time of this study the funding of Music Service's had been addressed by Central Government and the Music Service is now direct grant

funded. The decline in the amount of instrumental teaching had been halted and at the time of the study the demand for instrumental teaching in schools was growing rapidly. This was leading to a revival in music centre membership.

Summary

This study uses an ethnographic approach to examine musical ensembles in education. It explores the skills used in ensemble playing and the musical and social interactions that facilitate participatory music. This research also explores the processes by which the skills required to participate in ensemble playing are acquired. This area of musical education in under-researched and therefore, our understanding of the skills and processes involved is limited. The body of research that has been undertaken into musical learning and how this can be applied to educational ensembles is explored in Chapter Two.

Chapter Two

LITERATURE REVIEW

The teaching and learning of instrument and ensemble specific skills are areas that have not received the same amount of attention from researchers as class music teaching. Writings on implementing curriculum-related issues in music steadily grow in number while the number of research-based writings on the teaching of instrumental music, particularly group teaching in the maintained sector, and the development of ensemble skills have, thus far, remained comparatively few. Indeed, there has been very little, if any, research into the learning of instrumental ensemble specific skills in progressive ensembles.

That research which has examined instrumental teaching in the maintained sector has predominately concentrated on the organisational, or macro issues (Cleave and Dust 1989, Sharp 1991, Coopers & Lybrand and Mori 1994, Hallam and Prince 2000), or on the effects learning a musical instrument has on the general learning process (Leng and Shaw 1991, Rauscher, Shaw and Ky 1993, Sarnthein et al 1997). Investigations into pedagogical issues in instrumental teaching have been undertaken (Thompson 1984, Cooper 1985, Persson 1994, Hallam 1998) and one group of researchers have endeavoured to show an intimate link between

achievement and practice (Sloboda, Davidson, Howe and More 1996, O'Neill 1997). However, there has been little research into ensembles in musical education. It is the aim of this research to explore this area, particularly focusing on the acquisition and development of ensemble specific skills and the musical and social interactions that facilitate ensemble playing.

Learning in Music

There is a body of research that explores learning in music. Sloboda (1985:195-6) suggests that this area of research can be broadly separated into two main categories, that focusing on enculturation and that focusing on generative skills. Hallam and Lamont, in their review of research into learning in music, define enculturation as:

> "....general developmental processes that are characterised by, and resulting from, a shared set of primitive capacities, a shared set of experiences provided by culture, and the impact of rapidly changing general cognitive system".
>
> (Hallam and Lamont 2001:9)

Research suggests that musical enculturation commences about three months before birth, (Lecanuet 1996, Parncutt 1993) with the individual continuing to develop musical recognition after birth. By the time they reach the age of about twelve months old a child shows a preference for the music that conforms to the 'musical norms' that are around them (Trehub et al. 1997). This complex process of enculturation continues as the child grows and develops, with studies undertaken in France, the United States and the United Kingdom indicating that at about five years of age children understand diatonic scale structures and by about eight years of age

they are sensitive to the harmonic properties of tonal music (Dowling 1988, Lamont 1998, Imberty 1969). The skills and development encompassed by enculturation are non-technical skills that are acquired through listening and experiences provided by the culture in which the child is immersed as they grow and develop.

Sloboda's second category, generative skills, were described by Hallam and Lamont as:

> "....specific experiences not shared by all members of the culture, resulting in expertise, occurring in a self-consciously educational milieu, characterised by and resulting from specific specialised experiences, self-conscious effort, and instructional method".
>
> (Hallam and Lamont 2001:9)

Research in this category has investigated various aspects of musical learning. Some researchers in this area have examined the role of the teacher in learning processes in music (Davidson and Smith 1997, Yarborough and Price 1989, Barry and McArthur 1994), others have focussed on assessment (Johnson 1997, McPherson and Thompson 1998) and the development of skills in singing (Cooksey and Welch 1998, Howard et al. 1994, Welch et al. 1998). There has been research into the compositions of, and the process of composition in, school-aged children (Bunting 1987, Swanwick 1988).

There has also been research on personality characteristics of different types of musicians (Kemp 1996, 1997) while other researchers have explored the ways in which individuals approach learning an instrument (Hallam 1995). The areas of gender issues in the motivation to take up a musical instrument and the selection of

an instrument to learn (O'Niell 1997, Davidson 1999) and, girls and boys and the use of technology in music education (Comber et al, 1993) have been examined.

Research into the development and acquisition of those skills Sloboda categorises as generative has, apart for consideration of age and musical standard, largely been focused at the level of the group and has not considered difference between individuals (Hallam and Lamont 2001:13). It is also the case that research into generative skills has largely focused on the classical Western music tradition with little research into world music's, though recent research by Green (2001) has explored how musicians involved in popular music learn.

In summary, enculturation is rooted in culture and shared experience and is reflected in non-technical skills, on the other hand, generative skills are reflected in more specialised experiences and are produced through conscious effort. However, this division of music learning is to some extent artificial and Hallam and Lamont suggest that in practice these two categories of enculturation and generative skills are often intertwined (2001:9). Though the learning associated with ensembles and ensemble skills may be partially explained through enculturation or generative skills learning, or a mixture of both, it must be remembered that ensemble specific skills are skills of musical discourse and are therefore, inherently social. "Musical styles are maintained and developed through give-and-take in interpretative communities" (Swanwick 2001:7). It is the skills required to enter, participate in, and progress through these 'interpretative communities', represented by ensembles, musical

learning pyramids and other musical groupings, and the skills required to 'give-and-take' through musical dialogue that form ensemble specific skills. It is these skills that are the focus of this study.

Progressive Ensembles

There has been research that has examined the frequency of music centres and progressive ensembles. Sharp (1991:5) summarises her work in the following form:

> "....most authorities have music centres which provide the opportunity for children to extend the musical experiences they have in school".

She further notes that the only activities offered by all LEAs in music centres were ensembles, bands and orchestras. This replicated similar findings by Cleave and Dust (1989:113). Some researchers have specifically examined the work of music centres or progressive ensembles (Thompson 1985, Fletcher 1991, Firth 1996, Sloboda 1999). There appears to be a broadly accepted view among writers that musical learning pyramids do educate and progress, and that many musical objectives can only be achieved through centralised activity in area or authority ensembles. However, there has been little, or no, investigations into how learning and progression is achieved within progressive ensembles.

Sloboda (1999:10) discusses the importance of enabling people to "progressively occupy intermediate rungs on a ladder of skill progression" and suggests that traditional opportunities to progress through participation have declined. He draws attention to the opportunities to participate in music making available to people "in

earlier times" (ibid:10). He describes an age of gatherings in local public houses or at village festivals when community singing or playing along on the tin whistle or a violin would be tolerated, and even encouraged. He goes on to describe the more structured learning opportunities that were readily available within the church choir or a brass band:

> "Here, there would be a level of discipline and correction of blatant errors, together with a regular cycle of rehearsals and concerts. These institutions could allow a gradual progression in skill and accomplishment, so that someone might move from the back desk to a soloist position."
>
> (Sloboda 1999:10)

The picture painted by Sloboda of a glorious past of amateur music making opportunities is somewhat idyllic. It is difficult to conceive of the world described by Sloboda as existing in anything other than small pockets around the country. His suggestion that these perceived opportunities have declined ignores the many developments in music teaching and music making opportunities available to young people particularly in schools where, because of the requirements of the National Curriculum, all young people receive an experience of music and music making. While Sloboda's notion of structured learning opportunities and of 'gradual progression in skill and accomplishment' as the individual moves from the 'back desk to a soloist position' is an interesting, if unexplained, model of skill acquisition it is not unique to 'earlier times'. The opportunities for musicians to progressively occupy intermediate rungs on a ladder of musical and ensemble skill progression can be seen in many progressive ensembles and particularly in the ensembles within music centres.

However, there are differences between the learning achieved in Sloboda's 'earlier times' and the activities found in music centres. Though music centres may not have the formality of a classroom they are, to some extent, set in formal educational structures, whereas, 'traditional opportunities to participate in music making' were largely informal. It must also be remembered that in many cases the knowledge acquired in these informal musical settings was 'folk knowledge' as opposed to formal 'codified' knowledge as acquired in music centres.

Progressive Structures

Cleave and Dust (1989:109) describe music centres as places where pupils "are able to join with children from other schools in making music" and suggest that pupils who are members of music centres will ideally "have the support and encouragement of an 'extended family' of like minded peers and specialist instrumental staff". They go on to say that music centres are more than activity centres and suggest that they are centres of musical, social and general education. Cleave and Dust also describe the ladder of progression that forms the provision of ensembles in most music centres. They state that:

> ".....the junior or beginners group, followed by an intermediate and then, finally, a senior group was the general pattern. Some centres structured ensembles within each instrument group in the same way. A music centre in a Northern metropolitan district included in its programme, preliminary, intermediate and senior string ensembles; another in the same authority ran a junior, training and senior brass band".
> (Cleave and Dust 1989:114-115)

A case study of a music service by Caroline Sharp found a similar structure:

> "There is a service-level agreement with the LEA for running the twenty-four youth orchestras and ensembles. These include string orchestras; wind bands; a brass band, jazz orchestra and a percussion ensemble. The ensembles are area-based and aim to offer opportunities to children at different stages (for beginners, intermediate, and experienced players)".
>
> (Sharp 1995:49)

These descriptions give a clear picture of the structures and pathways available to young musicians in music centres. However, they fail to explain how progress and learning is achieved through these structures, how individual pupils acquire the ensemble skills that will enable them to progress to the next rung of the ladder.

Thompson (1985:18) suggests that there is a natural progression of skills in a music centre ensemble. He notes the progression of players as they gradually move from playing third clarinet or cornet parts to second parts then first parts as their musicianship increases. Thompson concludes that if ensemble rehearsals are not merely used to point out musical detail but are also made musical experiences then "it is possible to create an atmosphere which is conducive to critical listening and to the development of all-round musicianship. In these circumstances performance is seen as an adjunct to learning, not the reverse" (ibid:18-19). The notion that structured ensembles can facilitate learning had been discussed earlier by Swanwick who, writing on group instrumental tuition, cites the example of an American High School Band in which "people learn much of playing technique and stylistic understanding from the group itself" (1979:21). This research is premised on the

assumption that learning takes place within an ensemble and Swanwick postulates that understanding is learnt from "the group itself" but no suggestions are made as to how this learning is achieved. Both Thompson and Swanwick describe the progression that young musicians achieve through ensembles and both assert that learning takes place within ensembles. However, the skills that are learnt are discussed in generalised terms such as "all-round musicianship" and "stylistic understanding" or instrument specific skills such as technique. No suggestions are made as to the nature of ensemble specific skills or how the young musicians acquire them.

There has also been discussion about the importance of structuring progressive ensembles by matching standards of ability among players and the careful selection of repertoire. Some writers put great emphasis on the central role of the conductor, or ensemble coach, in the acquisition of performance skills by young musicians. There is also much discussion about communicating through music, music as art and music as performance. However, there appears to have been no examination of the processes involved in skill acquisition in progressive ensembles and little description of the ensemble specific skills that are learnt. The young musician's progressive development from novice ensemble member to accomplished ensemble performer is only described and discussed in structural terms.

Ensemble Research

Several authors have noted the relative dearth of research into music ensembles in education. Hallam and Lamont (2001:12) state; "there has been relatively little research on ensemble work although there has been some research exploring the interactions between conductors and their groups (Carpenter 1988, Durrant 2000, Witt 1986, Yarborough 1975)". Humphreys, May and Nelson (1992) suggest that the shortage of research into learning in ensembles springs from the inherent difficulties it presents to the researcher. They state that:

> "Despite their popularity and importance to the music curricula, meaningful research on bands, choirs, and orchestras has been difficult to formulate, especially research related to the teaching-learning process"
>
> (Humphreys et al., 1992:651)

They go on to suggest that the difficulties experienced by researchers who attempt to study music ensembles are rooted in ambiguity over the objectives for music ensembles. They suggest that some teachers and researchers view the music ensemble as a unique educational phenomenon, the success of which they attribute to its wide-ranging appeal as well as to the directness and simplicity of its objectives, though they do not state what these simple objectives are. They go on to contrast this perspective with that of other teachers and researchers who view the objectives of music ensembles as neither simple or direct, believing that ensembles should provide students with opportunities not only to participate in music making but also to experience the aesthetic satisfaction of an art form. They argue that "the failure of the music education professional and society at large" to agree more specific objectives for music ensembles has blurred the research process (Humphreys et al., 1992:651).

This explanation of why so little research into learning within an ensemble has been undertaken is unsatisfactory. The two perspectives of the role of ensembles they outline are not necessarily mutually exclusive. For example, the belief that ensembles should offer opportunities to experience the aesthetic satisfaction of an art form can form an objective that is both direct and simple. Furthermore, research is carried out from many perspectives, therefore, it is not reliant on "music education professionals and society at large" to agree on specific objectives for ensembles in order for research to be undertaken into the phenomenon. Research may provide the route to clarifying the objectives of music ensembles in education. Indeed, ensembles in education may have many different objectives.

Research that has been undertaken into musical ensembles has focused on student inputs and outputs rather then the specific skills of ensemble and the learning process by which they are acquired. Some research has been undertaken into student participation and achievement in ensembles, however, Humphreys et al., (1992) in their review of '*Research on music ensembles*' say, "more studies are needed on the differences between students who choose to participate in elective school music ensembles and those who do not". They summarise the research into participation and retention in school music ensembles by stating that several factors seem to predict which students will remain in a musical organisation. They identify "socio-economic status, self-concept in music, music aptitude, social attitudes, and various measures of scholastic ability" as sources of variation in statistically

significant differences between continuers and drop-outs (ibid:653). They add, "little is known about the effects of different types of instruction, teacher-related variables, and the interactions of these and other factors on drop-out and retention" (ibid:653).

A comparatively large number of researchers have examined the short-term effects of different learning strategies, programme types, and activities. These studies have focused on the effects of modelling, competition, jazz improvisation training and various other teaching, rehearsing and conducting strategies (Humphreys et al., 1992: 653). Another area that has been studied is rehearsal structure. Pascoe (1973) suggests that faster-paced, more familiar activities be placed at the beginning and end of the rehearsal while slower-paced, less familiar, more difficult activities should be placed in the middle portion of the rehearsal. Other researchers have concluded that the structure of a rehearsal affects student behaviour and attitudes (Cox 1986, 1989, Menchaca 1988, Murray 1975, Price, 1983, Thurman 1977).

Humphreys et al. (1992:653) suggest that research regarding predictors of student success in music ensembles has attained some fairly consistent results, with IQ scores, Musical Aptitude Profile (MAP) scores, Music Achievement Test (MAT) Scores, Seashore Measures of Musical Talents subtest scores, instrument timbre preferences, personality development, and certain psychomotor skills all seeming to predict success to a moderate degree. However, none of these predictors assess the musical interaction, musical dialogue and musical negotiation skills that are essential in ensemble playing. They all assess the learning experienced in ensembles through

the development of the musician's individual skill level, rather than by assessing the development of the individual's ability to musically interact with the ensemble and contribute to a greater whole.

The majority of research that has been undertaken into music ensembles has investigated the impact of the ensemble on the individual student and how students can better improve their individual skills through ensembles. However, little, if any, research has examined the precise nature of the ensemble specific skills acquired within ensembles, or the musical dialogue and interaction that is the essence of ensemble.

The Process of Learning

There has, of course, been much research into, and discussion about, the process of learning. Many explanations view learning as a process by which a learner internalises knowledge (discussed in Lee and Smagorinsky 2000). However, learning as internalisation is too easily seen as an unproblematic process of absorbing the given. Lave (in Chaiklin and Lave 1996:12) suggests that at least four issues trouble traditional cognitive theory. First, there is an assumed division between learning and other kinds of activity. Second, both the invention and reinvention of knowledge are difficult problems if learning is viewed as a matter of acquiring existing knowledge. Third, cognitive theory assumes universal processes and the homogenous character of knowledge and of learners (other than in quantity and capacity). Finally, there is a problem of re-conceptualising the meaning of mistaken

understanding in an heterogeneous world. There is an epistemological difference between a view of knowledge as objects, which are held within the individual's mind, and of learning as a process of internalising these objects and a view of knowledge and learning as a process of engagement in changing human activity. In the former it is 'learning' that is a problematic concept while with the latter it is 'knowledge' that becomes complex and problematic.

The assumption that there is a division between learning and other kinds of activity, that learning and development are distinctive processes and separate from the more general category of human activity requires two assumptions. Firstly, that knowledge remains static within the individual except during special periods of learning. Secondly, that the special circumstances for learning are provided through institutional arrangements. Viewed from this perspective young musicians acquire musical knowledge within a formal setting, they then apply that knowledge when participating in an ensemble. This perspective places musical learning, and ensemble participation and performance as separate activities. Ensemble specific skills could not be learnt and applied in the same setting. There are further difficulties in viewing musical learning as a matter of acquiring existing knowledge. The assumption that musical knowledge is simply transferred or internalised would suggest a uniformity of knowledge, that musical knowledge is the same in all. This perspective fails to acknowledge the different interests, aims and circumstances that constitute musical knowledge on a multitude of different occasions in many different settings. It also fails to acknowledge musical creativity and the role of

experimentation and adaptation in the acquisition of musical skills and knowledge. Musicians do not simply engage in the reproduction of given knowledge, rather they use musical knowledge as a flexible process by which they engage with other musicians and the wider social world.

Constructivism

Constructivism is undoubtedly a major theoretical influence in contemporary science and mathematics education. It is also a significant influence in literary, artistic, social science and religious education. Although constructivism began life as a theory of learning, it has progressively expanded its dominion becoming a theory of teaching, of education, of educational administration, of the origin of ideas, and of both personal and scientific knowledge (Matthews 2000:161). For some, constructivism is even larger than a theory of learning and education. Pépin (1998:174) states that constructivism:

> ".....also offers a global perspective on the meaning of human adventure, on the way human beings impart meaning to their whole existence in order to survive and adapt".

Thus one problem of appraising constructivism is being clear about what aspect of constructivism is being evaluated. Matthews (ibid:169) suggests that there are three major constructivist traditions: sociological constructivism, philosophical constructivism and educational constructivism. Sociological constructivism is identified with the 'Edinburgh School' of sociologists and their research on the

Sociology of Scientific Knowledge. Philosophical constructivism has its immediate origins in Thomas Kuhn's work and has been more recently represented by researchers such as Bas van Fraasen. Educational constructivism can be divided into personal constructivism having its origins with Jean Piaget and currently enunciated by researchers like Ernst von Glasersfeld; and social constructivism which has its origins with Lev Vygotsky.

The social constructivist ideas of the Russian psychologist Vygotsky have increasingly been recognised as important. Vygotsky's ideas date from the 1920s and 1930s but did not become known in the West until the 1970s. His influences can be found in the sociological ideas of Durkheim, Wundt's work on social psychology, the early writings of Piaget and the theories of linguistics and literacy theory emerging in the USSR in the 1920s (Bartlett et al 2001:138). In the English-speaking world it is his notion of the 'zone of proximal development' that has been his most important legacy to education. Wells (1999:313-314) states that the explicit formulation of the zone of proximal development appeared quite late in Vygotsky's writing, and then in two rather different contexts. In one version, which appears in a collection of essays entitled *Mental Development of Children and the Process of Learning* (Vygotsky 1935), the immediate context in which the zone of proximal development is presented is that of the assessment of children's intellectual potential, though Vygotsky presents the zone of proximal development as a more dynamic concept than that of an IQ score. The second version is to be found in Vygotsky's last major work, *Thinking and Speech* (1934/1987). In this second context the zone of proximal development determines the

lower and upper bounds of the zone in which instruction should be pitched. "Instruction is only useful when it moves ahead of development" (ibid:212), "leading the child to carry out activities that force him to rise above himself" (ibid: 213).

These two versions have some common features. Both emphasise that learning leads to development and the role of adult assistance and guidance in enabling the child to achieve more, with more expert help, than they would achieve on their own. However, these two versions also leave uncertainty about how the concept of the zone of proximal development should be understood and this has led to the zone of proximal development receiving differing interpretations. Lave and Wenger (1991: 48) suggest that these interpretations can be roughly classified into three categories. First, the zone of proximal development is characterised as the distance between a pupil's current level of learning, or problem solving ability, and the level he/she could be functioning at given the appropriate learning experience and adult or peer support. This 'scaffolding' interpretation could be applied to the learning of ensemble specific skills within a progressive ensembles. It could be postulated that young musicians are given support, from both conductors and tutors, while they are new to the ensemble with ensemble members participating unsupported as they become more senior and experienced within the ensemble. Secondly there is a 'cultural' interpretation of the zone of proximal development. This view construes the zone of proximal development as the distance between understood knowledge as provided by instruction and the everyday experience of individuals. In this interpretation the zone of proximal development for young musicians in progressive

ensembles is the distance between the musical knowledge acquired through instruction and their own experiences of ensemble participation. It is the distance between a young ensemble member's formal, taught musical knowledge and their active, experienced musical knowledge. Lave and Wenger argue that in both of these first two categories of interpretation of the concept of the zone of proximal development 'the social character of learning mostly consists of a small 'aura' of socialness that provides input for the process of internalisation which in turn is viewed as individual acquisition of the cultural given' (1991:48)

The third perspective of the zone of proximal development identified by Lave and Wenger is the result of contemporary developments in the traditions of Soviet psychology, in which Vygotsky's work figures prominently. Among these is the research tradition commonly known as activity theory (Bakhurst 1988, Engeström 1987). Engeström (1996:64) points out that "this tradition is not a fixed and finished body of strictly defined statements – it is itself an internationally evolving, multivoiced activity system". This third type of interpretation of the zone of proximal development extends the study of learning 'beyond the context of pedagogical structuring' to include the 'structure of the social world in the analysis' (1991:49). This interpretation defines the zone of proximal development as the 'distance between the everyday actions of individuals and the historically new form of the societal activity that can be collectively generated as a solution to the double bind potentially embedded in ..... everyday actions' (Engeström 1987:174). This view emphasises the changing relations within progressive ensembles between

novice ensemble members and 'old-timers'. It views learning in the context of changing, shared musical practice. This perspective enables thinking about the learning of ensemble specific skills to be focused within the ensemble. It acknowledges that musical learning can take place outside of formal, institutional settings and pedagogical structuring. It also posits that learning ensemble specific skills within a progressive ensemble is a process of changing shared practice.

Situated Learning

The study of cognition in its natural context grew out of dissatisfaction with the approach of traditional cognitive psychology (Bartlett et al 2001:150). Situated learning places the learner as a subsystem within a series of increasingly complex systems and learning exists as part of those contexts. Bronfenbrenner (1979) conceptualised human development as 'the process of understanding and reconstructing our ecological environment at successively greater levels of complexity' (Smith and Cowie 1988:10). Bartlett (20001:151) suggests that Bronfenbrenner's theory postulates four systems of development in context:

Microsystem: the home, the classroom, friendships.

Mesosystem: the links between microsystems, for example, no breakfast at home can lead to poor work at school.

Exosystems: the links between mircrosystems and settings in which the learner does not participate but is affected by, for example, a parents stressful work environment may lead to short temperedness with the child.

Macrosystem: the ideology and organisations of society in which the learner lives, for example, unemployment levels and social taboos.

Bronfenbrenner's model helps to explain the interconnected environmental factors that impact on learning. However, situated cognition theory goes further suggesting a collective knowledge, which is embodied in 'the ongoing, ever-evolving interaction' between people (Davis and Sumara 1997:115). The situated perspective also asserts that context-bound learning is more effective than the abstract representation of phenomena that constitutes much institutional teaching.

Whatever the merits of different learning strategies it is clear that learning is not the preserve of formal institutions and abstract representation. Learning occurs in many contexts and settings. The learning and skill acquisition that takes place in progressive ensembles is not abstract it is situated in an ensemble and has more in common with 'on-the-job-training', or apprenticeship, than with traditional academic learning. Dreyfus (1981, discussed in Elliot 1991:131-4) suggests that the acquisition of skill is largely a matter of learning to judge situations. He identifies four mental capacities involved: component recognition, salience recognition, whole-situation recognition and decision-making. He suggests that the components of the situation are either object context-free attributes or subjectively experienced context-dependent aspects. The novice can be taught to recognise object attributes 'without the benefit of experience'. He calls this kind of component recognition 'non-situational'. He contrasts this with the recognition of context-dependent aspects.

Recognition of these is dependent on prior experience of real situations in which the individual notes, or mentor points out, recurrent meaningful situational components.

Having identified four mental capacities Dreyfus suggests a five stage model of their development (see Figure 2.1). He argues that '*advanced beginner*' represents a marginally acceptable level of performance. Unlike novices, they are able to interpret meaningful aspects of situations. However, they are unable to discriminate between aspects in terms of implications for decision making. The '*competent*' stage represents the ability to reflect analytically on the experience of situations. It is at the stages of '*proficient*' and '*expert*' that analytical reflection is transcended by the ability to recognise holistically the meaning and significance of all the relevant aspects of situations. The development of capacities for situational understanding depends on the accumulation of experience.

Figure 2.1

	Component recognition	*Salience recognition*	*Whole-situation recognition*	*Decision*
1. ***Novice***	non-situational	none	analytical	rational
2. ***Advanced beginner***	situational	none	analytical	rational
3. ***Competent***	situational	present	analytical	rational
4. ***Proficient***	situational	present	holistic	rational
5. ***Expert***	situational	present	holistic	intuitive

Five stage model of development of situational understanding and judgement

(Dreyfus 1981)

The model suggested by Dreyfus could easily be applied to the development of ensemble specific skills, with young musicians moving from novice to expert. He acknowledges the importance of experience and situation. He suggests that situational understanding is the key to informed decision making and that at its most developed stage, this process ceases to be conscious and analytical and becomes holistic and intuitive. While the Dreyfus model satisfactorily explains situated understanding, and judgements made as a result of that understanding, it fails to address situated learning. There is the acknowledgement that 'human abilities change and develop with increasing amounts of hands-on experience' (Elliot 1991:133) but there is no explanation of how skills are acquired as a consequence of situated experiences or how situated learning is guided or focused by either a mentor or by the learner themselves.

Communities of Practice

There is a tradition of research into skill and its acquisition that suggests that structure plus motivation plus practise leads to skill (Ericsson and Smith 1991, Ericsson 1996) and it is easy to see how this model could explain ensemble specific skill acquisition in progressive ensembles. Progressive ensembles provide structure and the young musicians desire to learn, allied to a commitment to regular practise, lead to the development of ensemble specific skills. However, it is also important to

consider the social character of progressive ensembles. Lave and Wenger (1991, also Wenger 1998) situate learning in certain forms of social participation. They suggest that learning is a process of participation in communities of practice, participation that is first legitimately peripheral but that gradually increases in engagement and complexity. They introduce the notions of 'communities of practice' and 'legitimate peripheral participation'. They move away from the view of situated learning as 'some reifiable process that just happens to be located somewhere' (Lave and Wenger 1991:35) to one in which learning is an intrinsic part of generative social practice.

The newcomer or novice within a community of practice begins with legitimate peripherality. Lave and Wenger argue that this legitimate peripherality provides the learner more than an 'observational lookout post' but rather involves 'participation as a way of learning' (1991:95). It enables the learner to both absorb and also be absorbed in the 'culture of practice'. It is during this period of legitimate peripherality that the learner discovers what constitutes the practice of the community. It offers the learner exemplars of both behaviours at all levels of participation and of the product of the community of practice. The product of a community of practice could be delivering babies, producing clothes or creating a musical performance.

A community of practice is much more than the technical knowledge and skills required to produce the product of the community. Lave and Wenger define a community of practice as a 'set of relations among persons, activity, and world, over

time in relation with other tangential and over lapping communities of practice' (1991:98). They state that their use of the term community does not imply a primordial culture but rather assumes that members have various and different interests, make diverse contributions to activity and hold a broad range of view points. Their view of membership of a community of practice assumes participation at multiple levels. A community of practice does not necessarily imply geographical proximity, societal boundaries or easily identified social groupings. However, it does require participation in an activity system about which there is common understanding among participants about what they are doing, and what that means to them as individuals and communities.

Wenger (1998) further develops the concept of communities of practice. He suggests that they are an integral part of our daily lives.

> "(Communities of practice) are so informal and so pervasive that they rarely come into explicit focus, but for the same reasons they are quite familiar."
>
> (Wenger 1998:7)

He suggests that communities of practice can exist over centuries, for example communities of artisans who pass their craft from generation to generation (1998:86). Others may exist only for a short period of time yet be intense enough to generate indigenous practice and to have life changing effects on members, for example, a community that may form as people come together to deal with a disaster (ibid p86). However, the defining feature of a community of practice is not time but rather sufficient mutual engagement in the pursuance of an enterprise to

share some significant learning. He states that 'the concept of practice connotes doing, not just doing in and of itself, it is doing in an historical and social context' (ibid:47).

He suggests that learning is rooted in engagement and participation in a community of practice. He defines participation as:

> "....a complex process that combines doing, talking, thinking, feeling and belonging. It involves the whole person, including our bodies, minds, emotions and social relations".
>
> (Wenger 1998: 55-56)

He also states that engagement 'is not a synonym for group, team, or network' (ibid:74), but rather that 'inclusion in what matters is a requirement for being engaged in a community of practice' and that even when participants have much in common 'the specific coordination necessary to do things together requires constant attention' (ibid:74).

However, there are activities in which we all engage and from which we undoubtedly learn that do not require us to engage with others or participate with others except in the broadest possible way. For example, reading a newspaper is a form of learning, we learn about current events in the world. We normally do this as an individual activity. The relationship between a newspaper and its readership is largely passive. The vast majority of readers will digest the information without any wish to engage with the compilers of the newspaper or with its other readers.

Wenger postulates that the difference between mere doing and learning is not in the activity but is that 'learning – whatever form it takes – changes who we are by changing our ability to participate, to belong, to negotiate meaning' (ibid:226). However, there are times when knowledge is acquired and not applied, and times when knowledge is acquired without engagement with and participation in a community of practice. While all our learning and knowledge is the window by which we view the world our ability to participate, belong and negotiate meaning in that world is not always directly linked to what we learn. Rather, it is the culmination of many different pieces of knowledge and experiences that over time inform our perspective of the world and ultimately our ability to participate, belong and negotiate meaning, however, when any knowledge is acquired it must constitute a process of learning.

It must also be acknowledged that there are many methods of knowledge acquisition. Some are rooted in communities and practice and are situated in their natural context. Others demand the abstraction of the knowledge from the communities and practices to which they ultimately belong. However, there are other forms of learning such as experimentation and independent thought that may ultimately find their situation in communities and practice however, at the point of knowledge acquisition this learning stands independently of a community or of practice.

Wenger discusses education as an investment in a communities 'own future, not as a reproduction of the past through cultural transmission, but as the formation of new identities that can take it's history of learning forward'(ibid:263-264). However, in order for individuals to take a 'history of learning' forward it is necessary for them to understand the communities history of learning up to that point. This surely necessitates the learning of what has past, what Wenger describes as 'cultural transmission' before that knowledge can be applied to the development of a community's future history. That is not to say that these two processes are clearly demarcated or easily separated, the learner must live within the community about which they are acquiring the knowledge and therefore will need to apply some or much of that 'past' knowledge as soon as it has been absorbed, and as soon as it is applied it will be developing its meaning within community and therefore taking forward the history of that community.

However, Wenger's ideas are a useful model for the exploration of learning as they do not view learning as cognitive processes and conceptual structures. Wenger's notion of social learning places learning in the context of social engagements. In this model the individual learner does not acquire a discrete body of knowledge, which they then transport and reapply in later contexts. Instead they acquire the skill to perform by actually engaging in the process. This model is very appealing and could explain learning in a progressive ensemble, how an individual could, over time, progress from the back desk to a soloist position within an individual ensemble. However, within a progressive ensemble there is very little opportunity

for peripheral engagement if all the young musicians in an ensemble are of a similar playing ability.

This concept of peripheral engagement contains a potential paradox between the needs of the peripheral players and needs of the ensemble. In order to create learning opportunities less experienced players and more skilled players need to be members of the same ensembles, in order for the less experienced to observe behaviours and good practice as modelled by the more experienced players. However, too wide a skill gap between ensemble members could damage the musical viability of the ensemble. If musical learning is to be viewed in the context of social engagement this potential paradox, between needs of the peripheral players and the needs of the ensemble, will need to be explored. Indeed, the tension created by these two dynamics may hold the key to how pupils learn ensemble skills in progressive ensembles.

Summary

Viewing the learning of musicianship and the acquisition of ensemble playing skills as being primarily about social participation creates ontological and epistemological assumptions, which the researcher who invokes the 'social' dimension has to accept. These assumptions form the foundations for any exploration predicated on a theoretical perspective. Therefore the selection of methodology used to explore a research issue is not a 'free choice' made from the gamut of research tools available to the researcher, certain methods will be precluded, while others will fit naturally

with the researcher's ontological, epistemological and theoretical perspective. In the next chapter the ontological and epistemological perspective under-pinning this research project is explored along with the methodology selected as the direct consequence of this perspective.

Chapter Three

METHODOLOGY

The area of study chosen for research, and the methodological approach to that study, is rooted in the ontological and epistemological assumptions and perspective of the researcher. Ontological assumptions about the construction of the social world will inevitably influence what phenomenon are to be observed and epistemological assumptions, which are themselves rooted in the ontological, will influence the methodology applied to the research. It is necessary to understand the ontological perspective and epistemological assumptions on which any research project is founded if a proper understanding of both the research process and its outcomes are to be achieved. Failure to examine these assumptions leads to research being understood as a 'technology', as simply a set of methods, skills and procedures. However, science is social practice and therefore 'what it says and what it does is significantly located within that context' (Usher 1996:9).

Science as Human Activity

The methodology chosen to explore learning in progressive ensembles and musical learning pyramids (MLP), and indeed the choice of this phenomenon for study, are

value-laden decisions. These same values will influence the analysis and interpretations of the findings. Maturana draws attention to the notion that research is social practice, and that therefore what it says and what it does is significantly located within that context:

> 'Science is a human activity. Therefore whatever we as scientists do as we do science has validity and meaning as any other human activity does only in the context of human co-existence in which it arises'.
>
> (Maturana 1991:30)

Indeed this discussion of perspective itself reflects an ontological and epistemological position for until quite recently the orthodox view was that, although research investigates particular social contexts, the validity of its knowledge must come from being located outside of any context (Usher 1996:9). Before describing the methodological tools used in this project and explaining the reasons for their selection it is necessary to critically examine the ontological and epistemological assumptions on which it is based.

Nominalism and Realism

There are essentially two competing views about the nature of musical knowledge and the learning of ensemble skills. There is the traditional view, which holds that musical knowledge is founded on laws that are independent of the musician and therefore the study of musical knowledge and ensemble skills should be concerned with discovering these universal musical laws. The more recently emerged view emphasises that people are different and that ultimately musical knowledge and

experience is different for each individual. These different perspectives represent very different ways of looking at, and interpreting, musical knowledge. The ontological assumption of these two extremes is crystallised in the nominalist/realist debate. The traditional perspective sees musical knowledge, skills and performance as objective and external to individuals. It asserts that musical knowledge and performance have an existence independent of our conception, or perception of them, and that musical skills and musical performance have an independent existence. The nominalist perspective, on the other hand, sees musical meaning as a product of the individual consciousness, that the individual's view of musical meaning is created within that individual's mind.

These two contrasting approaches also make very different epistemological assumptions. The positivist approach sees musical knowledge and musical performance as something that can be acquired. As something that is hard, objective and tangible. This perspective takes sense-experience gained through observation and experimentation as the source of musical meaning. This approach posits that objective accounts of musical meaning can be given, and that the function of research is to develop explanations in the form of universal laws.

The more recent perspective sees musical knowledge and understanding as something that has to be personally experienced, as something that is essentially of a personal nature. The interpretive epistemology focuses on musical practice. It suggests that in order to explain musical meaning it is necessary to understand it and

therefore we need to understand the meanings that construct, and are constructed by, musical participation. Indeed symbolic interactionists would argue that the only real purchase we can have on musical knowledge is 'through the perspectives and viewpoints of those actors that are central to the setting we wish to study' (Scott 1996:66).

These two contrasting ontological and epistemological approaches lead to two very different perspectives and two very different approaches to researching and understanding ensemble performance and the learning of ensemble skills. The positivist approach sees ensemble music and the learning of ensemble skills as things that have an independent existence and therefore, they can be identified and measured independently of the musicians who practice them. This approach to researching the learning of ensemble skills aims to produce a set of universal laws that are applicable in all musical settings and to all musical learners. The opposing interpretivist view is that ensemble music and the learning of ensemble skills have to be personally experienced. This approach asserts that music and ensemble skills are the product of the individual consciousness and that musical realities are created within the musicians mind. This approach to researching ensemble performance and the learning of ensemble skills requires the researcher to experience these things through the eyes of the learner, to attempt to understand the various perspectives and understandings of musical skills and musical performance as experienced by the developing musician.

Determinism and Voluntarism

A further set of assumptions adopted by a researcher concern human nature and the perspective the researcher takes of the relationships between individual musicians and the ensemble. Given that musicians are both the subject and object of study, assumptions concerning musicians' relationships with their musical environment have far reaching implications. Two opposing positions colour the matter. In the first the actions of each individual musician within an ensemble are mechanistic responses to the stimuli of the music and the ensemble. This view sees members of a musical ensemble react in a prescribed way to both the music and to the other ensemble members. These responses are predetermined and the musicians' behaviour and view of the ensemble and its music is conditioned by these external factors.

The second position sees the individual musician's behaviour as resulting from 'free will', a model in which the musicians shape and control the ensemble. This voluntarism views the musician as controller as opposed to controlled. This perspective sees the ensemble member choosing how to act in response to the external stimuli of the ensemble and its music. The ensemble members are actively shaping the ensemble and the ensemble performance. These two positions of determinism and voluntarism are the extremes of the debate, and while there are social theories at these extremes, most social scientists' assumptions will probably fall somewhere between the two.

It is easy to see how ontology and epistemology coupled with assumptions about human nature will direct the choice of methodology. If the researcher adopts the objectivist/positivist paradigm, and views ensembles and musical participation as being like the natural world, then they will be drawn to a nomothetic approach. They will look for causality and law-like explanations. If, on the other hand, the researcher favours the subjective/interpretive paradigm, which stresses the subjective experience of the individual musician and the relativist nature of musical participation and performance, then their approach will be idiographic.

Quantitative and Qualitative

Most social scientists probably fall somewhere between the extremes of determinism and voluntarism indeed, researchers are increasingly using methodological strategies that traditionally would have been associated with the opposing ontological and epistemological perspective. It is therefore, inaccurate to assume that methodological strategies can necessarily imply the ontological and epistemological perspective of the researcher. It is easy to imagine that quantitative strategies (experimentation, correlation, survey etc.) will imply a realist ontology and objective epistemology and conversely that qualitative methodological strategies (ethnography, case study etc.) will imply a nominalist ontology and subjective epistemology. However, Scott (1996:59) suggests that the assumption that qualitative and quantitative methodological strategies 'represent two distinct and opposed approaches to the study of the social world is being challenged'. He argues that

drawing a distinction between qualitative and quantitative methods is of limited use and sometimes 'leads to misleading conclusions' (ibid:60). Hammersley (1992:159-172) similarly argues that the distinctions drawn between qualitative and quantitative approaches are of little value.

Verification or Generation?

Historically there has been a correlation between the purpose of research (theory verification or theory generation) and the approach used (quantitative or qualitative). Quantitative research has typically been more directed toward theory verification, while qualitative research has typically been more concerned with theory generation. While this correlation may be historically valid there is no connection between purpose and approach, qualitative research can be concerned with theory verification and quantitative research can be concerned with theory generation. It is also worth noting that there is a third purpose to research that of description. Description is often the goal of ethnography. Description is also the first step towards explanation. If we want to know why something happens it is important to have a good description of what happens. It is hard to explain something satisfactorily until you understand just what that something is (Miles and Huberman 1994:91). This point is particularly pertinent in the area of ensemble participation and learning in ensembles. Given that very little research has been undertaken in this area it may be necessary to produce rich and systematic description of some of aspects of the ensemble setting before it is possible to understand and suggest an explanation of it.

It is clear from the brief discussion above that, while social scientists may use labels to describe their ontological and epistemological assumptions, these descriptions are only labels and inevitably will not accurately reflect the complex mix of perceptions, assumptions and personal experience which come together to form an individual's perspective. Indeed, the use of these labels may be perpetuating a divide that is no longer relevant. The sociological perspective used to approach this research project will emphasise or highlight certain issues within that research. The choice of a different perspective would have emphasised a different set of issues. The chosen perspective offers a model of learning and making music in an MLP ensemble which, as with all models, attempts to represent the main features of the phenomena it is attempting to capture. Inevitably such a model will emphasise some features of learning and making music in an MLP ensemble at the expense of the others. When we see a good model we recognise it as a model and do not mistake it for the real thing. Neither positivism nor interpretivism gives a complete representation of society, but each draw attention to important features.

Sociological Perspective

The sociological perspective used to approach this research project could be described as interpretivist. The focus of the study is on social practices and there is the assumption that all human action is meaningful and therefore can be interpreted and understood within the context of social practices. It is also assumed that all knowledge is perspective-bound and partial, that the subject and object of research cannot be separated. The interpretive paradigm argues that the world cannot be

understood in terms of simple causal relationships or by the subsumption of social events under universal laws (Hammersley and Atkinson 1995:7). This is because human actions are based on, or infused by, social meaning. Intentions, motives, beliefs, rules and values drive human actions.

The aim of this research project is to explore the processes that facilitate learning within progressive ensembles. The methodology chosen to undertake this exploration was, to some extent, directed by the theoretical premise on which this study is based. This research is set in and as such becomes immersed in music making. It was important that the methodology chosen was responsive enough to capture the fluid and dynamic process of meaning making in music. The study required the gathering of what Geertz (1973) called rich data, or thick description, of the interactions between ensemble members and between ensemble leaders and the young instrumentalist. This is best achieved by adopting an ethnographic approach, realized in a programme of observations and interviews.

The assumption has been made that interpretation of part of something is dependant on interpreting the whole, and that interpreting the whole depends on an interpretation of the parts. This determination of meaning in the interaction of part and whole is called the hermeneutic circle of interpretation. This research project does not start with a hypothesis, but with some etic issues; issues the researcher brings to the research. These issues are not 'set in stone' and may evolve and change

as the research progresses, and will be effected by emic issues; 'these are the issues of the actors' (Stake 1995:20).

Research Questions

This research project began with a set of open-ended questions to allow for changes of emphasis and even direction as the study progressed. As described by Strauss and Corbin (1998:41) the initial questions started out broadly, they became progressively narrowed and more focused during the research process as concepts and their relationships were discovered. Parlett and Hamilton spoke of 'progressive focusing', and the three stages through which researchers move: observation, renewed inquiry and explanation:

> 'Obviously the three stages overlap and functionally interrelate. The transition from stage to stage, as the investigation unfolds, occurs as the problem areas become progressively clarified and re-defined. The course of study cannot be charted in advance. Beginning with an extensive data base, the researchers systematically reduce the breadth of the enquiry to give more concentrated attention to emerging issues.'
>
> (Parlett and Hamilton 1976:148)

The questions set at the commencement of the study were:

- What is the process through which young musicians acquire skills in progressive ensembles?
- Is there conflict between product and development in music centre ensemble work?
- Is there conflict between continuity and displacement in progressive ensembles?

- How does rehearsal becomes performance?

These questions are general enough to allow the emic issues to emerge and be related to the etic issues that had been identified as being of particular interest to the researcher. Woolcott (cited in Punch 1998:24) described this process as 'looking for questions' as opposed to 'looking for answers'. It was the aim to see the area of study through the eyes of the 'actors', the people who belong to the study. It was always a possibility that the research would end up some distance from its original research questions, or at least the questions would become considerably more elaborate.

This study focuses on musical ensembles that are part of a musical learning pyramid ensembles and attempts to see the ensembles and the learning pyramid as members of the ensembles see them. This approach is rooted in the ontological assumption that reality exists within the individual's mind; that consciousness is active in creating meaning, and in the epistemological assumption that knowledge is something that is personally experienced. It is the aim of this study to explore the 'actors' perceptions of the skills that are acquired in a progressive ensembles; to attempt to understand as fully as possible the experience of progressive ensembles as expressed by the participants. This is not a search for the absolute truths or facts of the issue, but for the truths and facts as perceived and understood by the participants. It is not only important that the world is seen through the eyes of the 'actors' but also that the issues, which emerge as the research progresses are allowed to inform the direction of the research.

It is not the purpose of this study to verify theory. The research questions were framed with the expectation that they could be modified or even superseded by the emergence of emic issues and that theory would therefore be generated. Theory generation was given 'new legitimacy' by the development of grounded theory (Punch 1998:17). Grounded theory was developed in reaction to the over-emphasis on theory verification in American sociology of that time. Glaser and Strauss stated this clearly in '*The Discovery of Grounded Theory*':

> 'Verification is the keynote of current sociology. Some three decades ago, it was felt that we had plenty of theories but few confirmations of them – a position made feasible by the greatly increased sophistication of quantitative methods. As this shift in emphasis took hold the discovery of theories became slighted and, as some universities, virtually neglected.'
>
> (Glaser and Strauss, 1997:10)

Glaser and Strauss argued that this emphasis on verifying existing theories kept researchers from investigating new areas, and prevented them from acknowledging the necessary exploratory nature of much of their work. The aim of this study was to analyse the data after each data collection exercise to enable the data to inform the direction and focus of the next session of data collection. Emerging theory was continually tested and shaped by the data as it emerged.

The Study

The ensemble types where chosen to be representative of the diversity of large ensemble provision offered at music centres. A string orchestra, a wind band and

Asian music ensemble were selected as being representative of the music centres across the authority. By studying three ensembles, each in effect an individual case study, it was envisaged that common or general themes and strands could be identified across all three while the number remained small enough to allow for detailed exploration of the learning process within each specific context. Next it was decided that the various ensemble levels represented in the music centres should be represented. Each ensemble was to be of a different performance standard, one elementary, one intermediate and one advanced, enabling comparisons between the different levels of progression to be drawn. It was also decided that the music centres represented by the selected ensembles should also be representative of the spread of rural and city music centres across the authority. Finally, the practicalities of data collection dictated that each ensemble should rehearse on a different night of the week. Given the criteria applied to the selection of ensembles for the study and the required pattern of ensemble rehearsals, the particular ensembles which made up the study became almost self selecting.

In accordance with the selection criteria the selected ensembles were from three different music centres. Each ensemble had a different instrumentation; the Junior Strings Orchestra consisted of violins, violas and 'cellos; the Intermediate Harmonium Group of electronic keyboards and the Senior Concert Band of woodwind, brass and percussion instruments. The selection criteria were designed to ensure that emerging themes were those concerning ensemble playing, rather than being instrument specific. The inclusion of the harmonium group gave the

additional advantage of ensuring that the phenomena identified related to ensembles and MLPs in the broadest way and were not themes only applicable to tradition Western musical ensembles.

This research programme was undertaken within a local education authority music service in northern England. Access and permission was sought from, and granted by, the responsible Local Education Authority. Staff and pupils of the music service were assured of anonymity and informed that they were not obliged to be part of this research and, even after agreeing to take part, could withdraw at any time. The music service was selected for its convenience as well as its suitability. However, there is no reason to assume that the learning process within the ensembles of the music service in this study is any different to that in other progressive ensembles. The convenience of access to these ensembles also enabled the maximum amount of researcher time to be spent in observation and interviews.

Ten rehearsals and all the public performances of each ensemble were observed over a twelve-month period, January 2001 through to December 2001. There is a natural twelve-month cycle in a progressive ensemble, beginning each September when new members join the ensembles and others leave to join more advanced groups. Empirical work spread over a twelve-month period enabled the ensembles to be observed at all stages of this natural cycle. By adopting a programme of observations and interviews that ran from January to January the particularly critical time in September, when new relationships are negotiated and new responsibilities

undertaken as pupils move between ensembles, could be observed with more understanding as these observations could be grounded in, and informed by, the observations made during the proceeding eight months.

Each observation was recorded in note form for later analysis. Immediately following each observation a semi-structured interview was undertaken with one of the participants. Interviewees were selected to represent different membership types in each ensemble, for example, newly joined members, section principals and various instrumental disciplines. These interviews were tape recorded for later transcription. An interview schedule was produced in advance of each session, but was often modified at the time of the interview to enable interesting events and happenings that occurred during the preceding rehearsal to be explored in the interview. There were also opportunities prior to, and immediately following, rehearsals for more informal conversations, questioning and observation of ensemble members. All ensemble conductors and leaders were interviewed at least once. Some were interviewed a second time as in some cases there was not enough time during the first interview to explore all the issues. As staff members were extremely busy on rehearsal evenings, in one case conducting or leading three consecutive rehearsals, the interviewing of conductors and leaders of ensembles was undertaken at times other than rehearsal evenings.

In addition to observations and interviews, documents were used as a source of data.

The musical scores and associated documents, such as individual instrumental parts

to scores and instructions to conductors and ensemble leaders, that are used by the ensembles were analysed. Catalogues of graded repertoire were explored, both formally and informally, with staff members. Also materials produced by the music service and music centres to explain to pupils and parents the various pathways through music centre ensembles and the standard of each ensemble were analysed and discussed with staff and pupils.

Given the nature of this study and the, at the time unknown, themes that were to emerge from the observations and interviews it is important that the progress of the study was grounded in, and informed by, the data being gathered. Therefore, although the timetable and process of the study was planned in advance adjustments were made in response to emerging themes and emic issues as these were uncovered. The analysis of data from each session of observations and interviews informed the emphasis of the next round of observations and interviews.

Observations

When deciding on the type of observation to be used in this research two things needed to be considered. First, the level of participation the observer would take in the activities of the ensemble that they were observing and second, the level of structure applied to the observations. There are two principal types of observation – participant observation and non-participant observation. In participant observation the researcher engages in the activities they wish to observe. Indeed, some researchers go so far as covertly living as members of the community they are

investigating, sometimes even using assumed identities and personal histories. Non-participant observation, on the other hand, requires the observer to remain detached from the activities they are observing. The researcher observes and records activities but plays no part in them. However, most field research roles fall somewhere between these two extremes. Junker (1960:36) distinguishes between the 'complete participant, participant as observer, observer as participant and complete observer'. The complete observer is a non-participant role. At this end of the continuum, the role completely removes the researcher from observed interactions and is epitomised by laboratory experiments that involve mechanical recording of behaviour through, for example, one-way mirrors (May 1997:141). These different approaches have different consequences for the level of obtrusiveness involved in data collection. This in turn will influence the level of reactivity in the observation or participant observation data.

In addition to the level of participation the researcher adopts during observations, consideration also needs to be given to the level of structure the researcher applies to the observations. The distinction between structured and unstructured observational techniques is analogous to that between structured and unstructured interviews. Quantitative approaches tend to be highly structured and to require pre-developed observational schedules and are usually very detailed. Qualitative approaches tend to be more unstructured. The researcher does not use predetermined categories and classifications, but makes observations in a more natural and open-ended way.

The ontological perspective of this study sees interactions, actions and behaviours and the way people interpret these and act on them as central. The epistemological perspective of this study suggests that knowledge or evidence of the social world can be generated by observing, or participating in, or experiencing 'natural' or 'real-life' settings and interactive situations. It was, therefore, necessary for the researcher to become immersed in the research settings and systematically observe dimensions of those settings, interactions, relationships, actions and events within the setting. The use of structured and detached observation techniques would be contrary to the ontological and epistemological assumptions underlying this study. However, this should not indicate a lack of planning or consideration, observations are heavy consumers of resources; they require the presence of the researcher or fieldworker. The observer normally has to travel to the setting, therefore there are time and travelling costs. There is also the time required to write-up field notes after each observation. It was therefore important that the observations in this study were carefully planned and considered prior to their commencement.

The settings observed as part of this study were music centre ensembles. These ensembles mainly comprise of young people, though there were a few adult members in one of the ensembles. The researcher was well known to all staff members, and many of the ensemble members, prior to the commencement of the study. These circumstances meant that adopting the role of 'complete participant' was not practical, nor necessary, to meet the aims of the study. For both practical and ethical reasons the approach of 'observer-as-participant' was chosen. On a

practical level this role allowed the researcher to be openly in the settings. It also allowed for normal interaction between professional colleagues to continue and it enabled the researcher to be drawn into participation in the rehearsals when the 'actors' within the setting signalled this as desirable. On an ethical level this approach enabled the researcher to be openly observing and taking notes with the full consenting knowledge of all participants. It created a transparency for both staff and pupils about the purpose of the researcher's presence in the rehearsals. Very early in the process the researcher appeared to be accepted and attracted little or no attention when entering the settings. During some rehearsals the researcher only observed, making notes at the back or front of an ensemble. At other rehearsals the researcher was drawn into almost continuous involvement in the rehearsal and therefore notes were written as soon as practicable at the end of the rehearsal, in order to avoid the loss of detail or the sharpness of images and events. The adoption of a participant observation approach not only reflects the ontological and epistemological assumptions underlying this study but also complements and supplements the other research tools used.

Interviews

Having decided to use interviews as part of the methodology for this research, the next consideration was what approach to interviewing would best suit this particular study. Interviews fall into three categories (Verma and Mallick 1999:123). There is the *'structured'* interview in which the interviewer has a list of prepared questions from which they cannot deviate. This approach is effectively an assisted

questionnaire. Another approach is the *'unstructured'* interview in which the researcher does not normally decide beforehand the exact questions they will ask, and does not ask each interviewee the same questions, though they will usually enter the interviews with a list of issues to be covered. The researcher allows the discussion to flow in a way that seems natural. Hammersley and Atkinson (1995: 152) describe this approach as reflexive interviewing. Between these two extremes of structured and unstructured interviews lies the *'semi-structured'* interview. As there is a continuum between the two extremes the extent of the structure within a semi-structured interview varies from case to case. The interviews undertaken as part of this study were similar in approach to that described by Hammersley and Atkinson as reflexive interviewing. The interview schedule design for each interview represented a list of issues to be explored rather than prescribed questions for the interviewee to answer.

The first stage in designing an interview schedule is to revisit the objectives of the study. As interviews were being used in conjunction with other research tools it was necessary to ensure that they were designed to fit their purpose and not merely to replicate data already collected. Interviews were used to expand on the data collected during observations and to act as a forum in which what Stake (1995:20) describes as emic issues could emerge. The interviews in this study fell into two categories; those involving ensemble members and those involving staff members. Interviews with ensemble members were undertaken immediately following a rehearsal while those with staff members were done by appointment and away from

the rehearsal setting. Therefore, the list of issues to be covered in ensemble members interviews were often modified moments prior to the interview taking place to reflect any interesting events that occurred during the preceding rehearsal. Whereas schedules for interviews with staff members were finalised sometime before each interview took place.

The design of the schedule for use in interviews with both ensemble participants and staff members was based on a discussion of the basics of designing a guide to a non-standardised interview by John Lofland in *'Analysing Social Settings'* (Lofland 1971: 75-84). Lofland suggests that having identified a topic that is appropriate to study by interviewing, the first step is to think through what is problematic or interesting about it. These he calls the 'puzzlements' or research questions. The next step is to note down the questions, which express each research question in order to tease out what is puzzling about the phenomenon. It must be remembered that all researchers are located in their own particular social context, with their own particular biographical background therefore, their point of departure is always what is puzzling relative to their own cultural perspective. The researcher in this study has a background as a musician and a teacher and therefore had a point of departure reflective of that biographical background.

The next step suggested by Lofland is to sort the research questions into related groups of topics. During the process of clustering the research questions, some will be discarded or amalgamated with others and new ones will emerge. Once this

process has been successfully completed the research questions can be decanted into a list. This list of questions should display a logical, orderly sequence, taking the form of an outline interview guide. The last step is to design probes. These may be couched in informal terms, or written flexibly, so that the exact words used to the respondent can be fine-tuned to best suit the context of the interview. This minimal structure is reliant on the detailed probes that accompany each main question. As with the main questions the probe questions are couched in terms that are applicable to the context and the interviewee. The discursive format of the unstructured interview means that the interviewer needs to keep all probe sub-topics in mind as the interviewee talks, mentally ticking off each one the interviewee explores and remembering to ask about the sub-topics the interviewee does not mention.

Given the grounded nature of this study and the desire to allow the preceding observation to inform each new interview, it was not considered desirable or practicable to pilot each interview schedule before it was used. However, it was considered important to try this approach to interviewing on friends and colleagues who were able to cast a critical eye over the type of questions that it was envisaged would be used, in the format. This process was used to ensure that the interview schedule was clear and to inform the development of questions in the field. The interview schedule was piloted on a group of colleagues who, though not familiar with progressive ensembles, are experienced in educational research. They expressed no concerns, and suggested no alterations to the over arching format of the schedule. This is, perhaps, not surprising given the discursive and reflexive nature

of an unstructured interview. Its success, as a research tool, is reliant on the rapport that is established between the interviewer and the interviewee, and on the interviewer's ability to guide the conversation to ensure that all the required sub-topics to each main question are thoroughly explored while, at the same time, allowing the interviewee to express their views fully.

All the interviews that formed part of this study used the approach out-lined by Lofland. All conductors of ensembles were interviewed one or more times. Members of ensembles were selected by age, instrument, time in the ensemble and position in the ensemble in order to get a representative group of interviews from pupils. Interviews with staff members were conducted by appointment and away from the rehearsal setting. The recording equipment was pre-placed. These interviews were often wide ranging in content and lasted up to sixty minutes. Interviews with ensemble members, on the other hand, were kept short as parents were often waiting to take their children home at the end of the rehearsals. These interviews were conducted in the rehearsal room often while the interviewee continued to pack away their instrument and associated equipment. This approach was used to set the young interviewees at ease and to allow for references to happenings in the preceding rehearsal, which would be easier to understand or describe with reference to the rehearsal room, musical equipment and sheet music.

These interviews were recorded on a small hand-held micro-cassette recorder.

Documents

Documents are a rich source of data for social research. As a research tool content analysis has a long tradition in sociology. Content analysis is conducted to analyse documentary information. As well as being an important research tool in its own right, content analysis is also "an invaluable part of most schemes of triangulation that is, using an intersecting set of different research methods in a single project" (Macdonald and Tipton 1993:188). The term 'documents' includes a vast range of materials that are drawn from many different places. The documents analysed in this study took the form of musical scores and associated documents. The associated documents included individual instrumental parts to scores, instructions to conductors and ensemble leaders, and lists of graded repertoire.

Gathering data by studying documents follows the same line of thinking as observing and interviewing. The process needs to be structured and planned, yet be open to unexpected themes or clues. Research questions should be carefully developed in advance. The potential usefulness of different documents should be evaluated prior to data collection commencing and time allocated so that it is judiciously spent. Just how much time a document will need cannot be determined in advance but having a plan can make the researcher more alert to setbacks and revelations. Documents can be key repositories or contingencies and often documents serve as substitutes for records of activity that the researcher could not observe directly (Stake 1995:68).

There is a substantial repertoire of graded ensemble music that is used in progressive ensembles. Content analysis of the music scores and other documents used by and associated with the ensembles in this study were studied to help to clarify and inform the data gathered in observations and interviews. There is, of course, a long tradition of content analysis among musicians and musicologists. However, it is not the purpose of this study to contribute to the debate about musical style, tonality, form and history but rather to examine progression in graded ensemble music. Musical scores were analysed in order to explore the boundaries of range, key and technical difficulty assumed of ensemble players at different levels and to explore how composers challenge and limit young performers. The analysis of graded ensemble music was approached in a similar manner to that of investigating a class reading scheme or evaluating a school improvement plan.

Data Analysis

A qualitative study such as this one produces a great deal of data and therefore it was essential to commence coding the data almost as soon as data collection had commenced. The data was initially coded as individual words, and small and large chunks of data. Codes were not pre-specified but emerged form the data itself. These early codes were simply descriptive; no inferential codes were applied in the early stage of analysis. This coding provided the basis for storage and retrieval of the data. This ran concurrently with a process of data reduction which, while helping to keep the amount of data manageable was also helpful in the development and clarification of more abstract or pattern codes. Both forms of coding and data

reduction continued throughout the analysis process. Data was continually revisited in light of new codes emerging. Memos were written as and when thoughts and ideas about relationships and codes were suggested by the data. All these processes continued concurrently even during the processes of abstraction and comparison.

Objectivity

Objectivity and the extent to which abstraction in rooted in the data or is led by researcher bias is always a concern in qualitative approaches to research. Therefore, as the researcher has been involved in music education and specifically in LEA based music service provision for many years, in both a teaching and management capacity, it was necessary to undertake a systematic process of reflection in an effort to guard against the possibility of assumptions being made, and of preconceived ideas colouring the data and data collection process. It was important that as explanations and themes emerged from consideration of the data that these explanations and themes were triangulated against other data sources before being returned to the ensembles and individuals for validation against the practice of the ensembles and in a search of other possible explanations. Given that the researcher was in reality the line manager for most of the teaching staff involved in the research it was also important to keep in mind the possibility of leading interviewees and therefore, a great deal of thought had to be given to constructing questions to ensure, as far as possible, that a genuine response was elicited. This was particularly true when returning to the setting to validate explanations and themes and also when

feeding-back the findings to the informants in the study to check that themes and explanations accord with their feelings and practices.

Vignettes

An ensemble rehearsal is a very complex activity and one that is only familiar to current or former practicing musicians. Therefore, as a method of giving the reader some insight into the practice of a progressive ensemble rehearsal some of the data from the study is presented in the form of two vignettes (see Chapter 3). The data was only edited into vignettes for the purposes of presentation and as such formed no part of the process of data analysis. The vignettes do not represent a reduction of the data but rather are a method of presenting examples of the findings in a descriptive and holistic way. Observational sequences containing selected examples that are to be cited elsewhere in the text were formed together along with sequences from other observations, and background information collected from other data sources, in order to give the reader an insight into the practice of ensemble rehearsal and provide something of the flavour of music making in progressive ensembles.

It is acknowledged that this editing process, by its very nature, has the potential to distort some of the characters and events that are described and of course the rehearsals described never actually took place, rather each separate observational sequence took place and has been selected to be joined with other sequences in a vignette for the value of the examples of themes or explanations they contain or because of insight they provide into the practice of progressive ensembles. However,

it is considered that the advantages of being able to present a representative holistic view of progressive ensemble rehearsals will add to the overall level of understanding.

Selection of Examples

The decisions about which examples were to be cited to support the explanations and themes were taken in order to create clarity. Musical rehearsals are very complex activities and even during the most junior rehearsal many things are happening on many different levels simultaneously. The examples cited have been chosen because they represent an example in the data that focuses clearly on the theme or explanation under discussion and are not partially hidden or entwined with other activities or themes. Therefore their value as an example is clear. The selected examples were chosen because of their clarity and because they are clear examples of the theme or explanation being discussed. They do not represent most occurrences of particular phenomena as the majority are entwined and overlaid by other activities and phenomena; however they are representative of the each theme or explanation as a theme or explanation.

Ethical Issues

In common with all social research, this research project involved people and particularly children. It is not the purpose of this research to make judgements about ensemble leaders or ensemble members, nor to compare approaches to ensemble

conducting or coaching, but to explore the processes by which learning occurs in progressive ensembles. However, it was necessary that all individuals who were observed or interviewed as part of this project were involved in the project of free choice and that their anonymity be assured. In order to preserve that anonymity the names of individuals, ensembles, music centres and the Music Service are pseudonyms.

Prior to commencement of the project all participants in the selected ensembles were invited to take part in the research. This invitation informed them that they were not obliged to take part and that should they commence the process and then have a change of mind they were free to withdraw at any point. As the researcher is employed by the local education authority in which the investigation took place it was important that staff members involved did not feel under any obligation to participate. Staff members were assured that they were under no management pressure to be a part of this research project. It was also important to give the assurance that the data collected would not be used as part, or to inform decisions about any part, of the Music Service's appraisal or performance management process.

The dates of observations were agreed in writing at the beginning of the process. Where dates had to be changed from those agreed, this happened on two occasions because of severe weather conditions, rearranged observation dates were agreed with the ensemble conductors/leaders concerned. Interviewees were approached in

the week before they were to be interviewed to confirm their willingness to participate and to allow time for changes to arrangements for collection from the rehearsal by parents to be made, where applicable.

Conclusions

It is important in any research project to ensure that the research tools are fit for their purpose. When designing research tools that are to be used in the same project it is important that each tool is designed with clear data gathering aims and that each tool is supplementary or complementary to the other. The methodology used in this research was designed to be responsive enough to capture the fluid and dynamic process of music making and learning in an ensemble. The methodological design was chosen to gather rich data on the interactions between ensemble members and between ensemble members and their leaders.

Chapter Four

TWO VIGNETTES

This chapter contains two vignettes that describe rehearsals of two ensembles, each representing a different level in their respective musical learning pyramids. The first describes a rehearsal of a junior string orchestra and the second describes a rehearsal of a senior concert band. The purpose is to provide narrative accounts that enable the reader to experience something of ensemble membership and participation in a progressive ensemble. After the narrative vignettes presented by Wenger in *Communities of Practice* (1998:18-38) the rehearsals described below are representative of real rehearsals and are a collection of actual events. Although not all the events described where observed at the same rehearsal the vignettes are constructed from lengthy observational sequences made of the ensemble being described. Similarly, the characters in the vignettes were members of the ensemble in which they are described however, occasionally in order to maintain the narrative of the vignette names have remained constant across sequences when the real life identity of the character changed. All names used are pseudonyms.

As discussed earlier (Ch 3:70) the purpose of presenting data in this fashion is to give the reader an insight into the complex and unusual world of an ensemble rehearsal. The data was not analysed while in this format but edited into these vignettes as a method of presenting examples in a way that reflects the totality of musical ensemble rehearsals. While it is acknowledged that presenting the data in this way has the potential to distort some events and characters it is considered that these holistic descriptions of progressive ensemble rehearsals, along with the opportunity they afford to include background information collected from other data sources, will add to the overall level of understanding.

Vignette I follows Jody and Chantel, two young second desk violinists, and Tim and Jonathan, two recently joined fourth desk violinists, through a rehearsal of the Junior String Orchestra. This orchestra's membership consists of young string players, most of whom are of primary school age with two or three years of playing experience. This vignette aims to provide a view of a junior MLP ensemble rehearsal from the standpoint of the four young violinists and also to describe the level of musical and synchronic maturity expected of its members.

Vignette II describes a rehearsal in which the Senior Concert Band is preparing for a concert performance. The players in this ensemble are technically and musically more advanced than members of the Junior String Orchestra and all are of secondary school age. This vignette provides a description of a senior MLP ensemble rehearsal from the viewpoint of the band's conductor, Colin Lovell. It also illustrates the level

of musical synchrony and the necessary contributory skills assumed of the young musicians at a senior level within a music centre.

Vignette I

Junior String Orchestra

Jody enters the rehearsal room with the confidence of someone who belongs. She pauses momentarily to see if any of her friends have arrived yet. She spots Chantel at the far side of the room and sets off in her direction. As Jody passes Mrs Barlow, the conductor of Junior String Orchestra, Mrs Barlow says, "good evening Jody, we're a bit thin on the ground tonight". Jody replies "I've just seen Sam and Liam in the car park, they'll be here in a minute". She continues across the room and joins Chantel who is busy removing her violin from its case. Jody lays her violin case next to Chantel's and the two girls chat as they attach shoulder rests to their violins and tighten their bows before applying rosin.

There is a sudden rush of arrivals about two minutes prior to the start time of the rehearsal. Having observed this sudden influx of members Mrs Barlow moves to the conductor's music stand and claps her hands twice, "right, as quickly as we can please, let's make a start". Jody and Chantel stroll across to the second desk of second violins and begin to rearrange things to their liking. Chantel raises the height

of the music stand while Jody shuffles her chair until it is at a slight angle to the music stand before she removes various pieces of music from the music folder.

Jody and Chantel joined Junior String Orchestra just over eighteen months ago after twelve months in Beginner String Group. They spent their first year in Junior String Orchestra on the back desk of second violins but were moved to the second desk at the beginning of the academic year. Jody's violin teacher has suggested that she might move up into the Intermediate Youth Orchestra in September, but Jody would like to spend another year in Junior String Orchestra. She would like to play first violin at some stage and also her friends are in Junior String Orchestra.

Mrs Barlow speaks again her voice raised to a level that can be heard above the background noise of thirty-three young people talking and adjusting equipment. "Okay, ssshh, let's tune". The ensemble goes quiet almost immediately and Mrs Green, the violin tutor for the Orchestra, plays an 'A' on the electric piano, which is situated behind the violin section. She plays the note several times before a few players begin to take it up. From then the sound grows very quickly as all the orchestra begins to tune. Mrs Barlow and Mrs Green move among the players helping them, where necessary, to tune their instruments. After a few minutes Mrs Barlow returns to the conductor's music stand, claps her hands and calls out "okay, let's make a start, let's start with Old Joe Clarke".

There is a buzz of noise and activity around the orchestra as the members find the appropriate sheet music. Jody and Chantel talk excitedly as they look for the music, they both greatly enjoy playing this piece. After a few minutes has passed and most players have the music on their music stand Mrs Barlow raises herself to her full height and begins slowly casting her gaze over each section of the orchestra. Some orchestra members sense that she is ready to start and sit straight and attentively in their seats. The level of noise and activity decreases until there is just one centre of commotion remaining, at the back of the second violins. Mrs Barlow stares directly at the two boys, Tim and Jonathan, who have not yet found the sheet music and are beginning to argue about the best approach to finding it. Mrs Green steps up behind them, reaches over and takes the music folder from Tim. She quickly finds their part to Old Joe Clarke and places it on their music stand. Tim and Jonathan look a little sheepish but sit attentively ready to start.

"Right" says Mrs Barlow "from the beginning, remember that the piano plays the first four bars then you're in violins, okay?". They commence, Mrs Green at the piano. Jody and Chantel play with assurance and gusto. During periods of rest they mouth the count to each other and re-enter with confidence. They watch Mrs Barlow intently and actively lead when she begins a rallentando or tempo change. Tim and Jonathan, on the other hand, look at their fingers each time they change hand position. On several occasions they miss the first few notes of a new phrase. Tim plays the last note of the piece early, an obvious and exposed mistake that, much to his discomfort, draws him looks from other ensemble members.

"Right that's sounding good" remarks Mrs Barlow when the orchestra finishes playing. "Can we play it again" asks Jody. "We'll see how the rest of the rehearsal goes" replies Mrs Barlow "we might do it again then". "Yessss" says Jody as she turns and smiles at Chantel. Mrs Barlow instructs the orchestra to find the sheet music to Suzanna. While the players find the appropriate sheet Mrs Barlow reminds them that there will be no rehearsal next week as the building is closed for the duration of the forthcoming school holiday. The orchestra settles down much quicker this time and is silent and ready to play after a few minutes.

Mrs Barlow reminds the orchestra of the main rehearsal points from the last rehearsal of Suzanna. She raises her baton, gives a preparatory beat and the orchestra commences playing. They play the first eight bars and Mrs Barlow stops them. "'Cellos what key are you in?". Helen, the principal 'cellist replies "we've got three sharps". Mrs Barlow asks her what the three sharps are. "F sharp, C sharp and G sharp" replies Helen. "Good" says Mrs Barlow "can we remember that please?". While they have stopped Mrs Barlow takes the opportunity to remind the violins of the dynamic strength indicated at the beginning. The principal violinist, Kelly, asks Mrs Barlow what bowing the violins should be using in bars four and five, because "we're all doing it differently". Mrs Barlow agrees and indicates the bowing she requires, which some players mark on the sheet music. They start the piece from the beginning. Once again Mrs Barlow stops them after eight bars. "Seconds watch the rhythm at bar four", she articulates the rhythm "frog, tadpole, frog frog, frog,

tadpole, frog frog". She angles her body towards the second violins "okay, here we go". The second violins play bars four and five. Mrs Barlow turns to face the whole orchestra "right from the top, three, four"

During this period of rehearsal Jody and Chantel's playing of their part visibly improves. Their posture becomes increasingly confident and positive and their focus moves from playing the notes accurately to their place in the overall structure. Tim and Jonathan appear to find the pace of the rehearsal disconcerting. They always seem to be the last to find on their sheet music a re-start point or a passage under discussion. They are invariably not ready to start when their section or the whole orchestra start playing and when they do join in it is done hesitantly.

Suzanna is rehearsed in segments of about eight bars in length. Sometimes shorter passages of two and even one bar in length are rehearsed, but these are always then placed back into the context of the eight bar phrase before moving on. When all the segments have been rehearsed they start the piece again from the beginning. They are about half way through before Mrs Barlow stops them to correct an error. They once again start from the beginning and this time play through to the end. Mrs Barlow praises the progress made "good, that's coming along nicely" and continues "right let's have a break, sat down ready to start in ten minutes".

Jody and Chantel stand and lay their violins, with bows by the side, on their chairs. They make their way across to sit with a group of friends on the 'cello section. They

have brought some fruit and drinks with them, which they eat and drink as they chat. Tim and Jonathan leave the rehearsal room. Helen and Kelly remain seated and talk to each other across the conductor's music stand. Mrs Barlow and Mrs Green enjoy a cup of coffee at the back of the rehearsal room. When the ten minutes have passed Mrs Green makes her way back to the conductor's music stand and claps her hands "okay, let's a start". The players move back towards their seats. Jody and Chantel collect the remains of their fruit and empty drink cans and take them with them back to their seats. When Mrs Barlow is about to re-commence the rehearsal she notices that Tim and Jonathan are missing. Mrs Green volunteers to go and look for them. Before Mrs Green reaches the rehearsal room door Tim and Jonathan enter. "Come on, hurry up" calls Mrs Barlow and the boys speed up their step and take their seats quickly.

Mrs Barlow addresses the whole ensemble "okay, just a bit of sight-reading for you". Mrs Barlow and Mrs Green give out the parts to The Tunes from Shakespeare's England. Jody and Chantel look at, and discuss, their part, pointing to the sheet music with their bows. "Right" calls Mrs Barlow gaining everyones attention "we've got three sharps, can you tell me what they are?". Robin, who leads the second violins, names the sharps correctly. "Good" says Mrs Barlow "Mrs Green do you want to play the first few bars so they can see how the tune goes?". "Now that's the main tune" Mrs Barlow tells the orchestra when Mrs Green stops playing "and then we play variations". She goes on to give a brief description of each variation, and finishes by saying "right, here we go after four, three, four".

They play through to the end of the theme where the music comes to a natural stop. Mrs Barlow walks around to the back of the violin section and has a brief conversation with Mrs Green. The orchestra members talk quietly amongst themselves. Mrs Barlow returns to the centre. "Right, let's just try it one more time and let's try and play it all the way through". During periods of rests Jody and Chantel count the beats out loud, counting the passing bars on their fingers. On several occasions Jody is hesitant making an entry but quickly regains her place. Tim and Jonathan get completely lost on several occasions, each time Mrs Green helps them to find their way back in. However, they both give up completely and stop playing before the end of the piece.

Mrs Barlow asks them to play variation four again because "that's perhaps the hardest one". She asks the second violins what note they are playing at the beginning of variation four. Jody replies "G flat". "No" says Mrs Barlow "its G natural, that's a natural sign. Let's have violins only at variation four. Okay, ready? Tim, can you find it?" Tim has a look of total bemusement but brings his violin up into the playing position. "Here we go one, two, three, four". As the violin section commences playing Tim puts his violin back down on his knee. Mrs Green steps up behind him and points to the correct place in the music and nods encouragingly to Tim. Almost reluctantly Tim joins in with the rest of the violin section. Jody continues playing after the remainder of the section finish, but Mrs Barlow ignores this obvious mistake. "Okay watch the rhythm at the beginning, okay here we go

one, two, three, four". As the violins reach the end of variation four Mrs Barlow instructs them to "keep practising that silently while I hear the 'cellos". Jody and Chantel immediately begin to practise their part. They work independently but ask each other for clarification as required. Mrs Barlow finishes rehearsing the 'cello section through variation four by drawing their attention to a low 'C' sharp. "Oh yeah 'cellos, you've got a bottom 'C' sharp near the end there, can you mark it please so that you don't forget?". The 'cello players take their pencils from their music stands and write on their parts.

Mrs Barlow turns to face the whole orchestra again "okay, we'll leave that bit now, let's have a look at variation one. It's a bit softer, it's only m.p., so softer. Here we go then after four, one, two, three, four". As they finish playing through variation one Mrs Barlow turns to the violin section "listen to your tuning". Each member of the violin section plays passages of variation one independently. Jody checks the intervals between notes on the same string carefully. After a few minutes Mrs Barlow holds up her hand for silence "okay violins let's do it again". This time the second violins finish playing the variation two bars before the first violins. Mrs Barlow feigns a look of disappointment and despair. Jody and Chantel laugh rather apologetically. "Okay" says Mrs Barlow to the second violin section "shall we just hear what you're doing". The seconds play the section correctly this time. "That's it, that's better", says Mrs Barlow. She turns her gaze to the 'cello section. "I don't think we need to do your bit 'cellos" she continues "oh no let's do variation two 'cellos, we just need to put some fingerings in". Mrs Barlow takes the part off the

music stand of the first desk of 'cellos and calls out the fingerings she requires marking the part she holds in her hand as she goes. The remainder of the 'cello section listen carefully and mark their own parts. When this process has been completed Mrs Barlow replaces the sheet music on the music stand of the first desk of 'cellos and says "okay, here we go then 'cellos, one, two, three, four". The 'cello section play through variation two using the new fingering patterns.

Mrs Barlow addresses the whole orchestra "right, let's play it all the way through then. Okay here we go, all the way through". Mrs Barlow waits a few moments for Tim and Jonathan to get ready to play. "Watch the dynamics, here we go, one, two, three, four". During a period of rest for the second violins Jody and Chantel mouth the beat count to each other while counting the passing bars rest on their fingers. After one period of rest Jody enters half a bar early. She stops playing almost immediately, quickly realizing her mistake. She then successfully re-enters in the correct place. She makes an almost identical mistake eight bars later and once again quickly realizes her mistake, stops playing and successfully re-enters in the correct place.

When the orchestra has played to the end of the theme and variations Mrs Barlow looks directly at Jody and Chantel. "Shall we finish with Old Joe Clarke". Jody and Chantel nod their heads enthusiastically. Not all members of the orchestra are as pleased about this as the two girls and one or two moans can be heard coming from the 'cello section. "Come on then let's do it," says Mrs Barlow jollying everyone

along. There are a few moments of activity as the sheet music is changed and some short conversations take place. "Right, we're running out of time, lets go" calls Mrs Barlow. The orchestra commences playing Old Joe Clarke. Jody and Chantel play with confidence and vigour. They count bars rest together, though this is done for little more than shared pleasure, as they are both sure and confident of their entries. Tim and Jonathan also play with more confidence than they displayed while rehearsing Tunes from Shakespeare's England. They do display moments of hesitancy and sometimes appear to lack confidence in their own ability when making entries or playing more complicated patterns. However, at no point in the piece are they lost and they finish confidently with the rest of the orchestra.

During the playing of Old Joe Clarke a group of parents enter the room and stand quietly by the door ready to collect their children. The orchestra members are aware that the rehearsal is about to end and as soon as they finish playing Old Joe Clarke they begin to talk loudly and start to pack away their equipment. Mrs Barlow raises her voice "thank you, we're not quite finished". Mrs Barlow raises her voice still further "thank you". The room falls silent and those that have left their seats return to them. "Now" says Mrs Barlow "there's no rehearsal next week, as it's half term. We're back the week after that so, next rehearsal is in two weeks time. We are then only three weeks away from the concert so we have a lot of work to do. Okay, have a good half term and I'll see you in two weeks time". Immediately the noise level rises again. Mr Barlow shouts over the din "make sure you put your stands away please".

No one acknowledges Mrs Barlow's request as they get on with the task of packing away their instruments and equipment.

Jody makes her way to the front of the orchestra where Mrs Barlow is folding down a music stand. "Mrs Barlow can I take that new piece home to practise?" Jody asks. Mrs Barlow thinks for a few moments then says to Jodie "alright then, but take good care of it, don't lose it and don't forget to bring it to the next rehearsal". "Thanks" says Jody. She returns to the second desk of second violins and collects all the music up together. She removes the part to the theme and variations, before putting the rest into the music folder. She places the folder on her chair and then walks across to join Chantel who is putting her violin away in its case. The two girls chat together as they release the tension on their bows, remove the shoulder rests from their violins and place each component in the appropriate place in the case. Chantel finishes this task before Jody but continues to chat as she waits for her friend to finish. The two girls walk across the room towards the door. As they reach the door Jody hands her violin case to her father, without interrupting her conversation with Chantel, and the two girls leave the room together. Jody's father raises his hand and calls across the room "thanks Mrs Barlow". Mrs Barlow turns around "oh, good night Mr Napier" she calls. Mr Napier smiles and leaves the room, carrying Jody's violin case.

Vignette II

"Where's that tuba player

The Senior Concert Band is settling ready to play. There are still several conversations taking place along with the sounds of instruments being played, but everyone appears to have their instruments assembled and their music folders on their music stands. Mr Lovell is squatting by the side of the conductor's music stand. He is sorting through his music scores, looking at the front cover of each in turn and then placing each on one of two piles on the floor. On finding the one he is looking for he rises to his full height and holds it in front of his chest with the title page facing outwards. Several of the players notice Mr Lovell standing, take a look at the score front and start looking for their part to the piece. Very quickly the conversations and playing of instruments stops as the band members look at the front of the score being held up and then look for their part to it in their music folders.

When all the ensemble members have either found, or are actively looking for their parts, Mr Lovell places the score on his music stand and opens it. He looks in the direction of the trombone section and asks "is William coming tonight?" Peter, one of the trombone players replies "he was at school today". William is the band's only tuba player. He is a very good and confident player. When he is playing, the addition of the bass line seems to affect both the sound of the band and the

confidence of all the players. However, William is sometimes a little unreliable. Denise, the principal flautist remarks that "he might just be late". Mr Lovell does not respond to this suggestion but addresses the trombone section again, "does he know it's the concert in two weeks?" Peter replies that he doesn't know whether William is aware or not. "Okay, let's play it anyway" says Mr Lovell turning to face the whole ensemble.

The band commences playing *A Borodin Festive,* a selection of the melodies of Borodin, one of the pieces they intend to play in the concert. At the end of the third melody Mr Lovell stops them. "Okay, let's tune" he says pointing to Peter the principal clarinet player. Peter plays a sustained B flat. After a few seconds Mr Lovell nods his head as a cue for the rest of the ensemble to tune to Peter's note. As the band members tune their instruments Mr Lovell moves around assisting individuals where necessary. As the ensemble settles down and falls silent Mr Lovell moves back to his position at the conductors stand, "okay" he says "let's just try from the andantino again".

They commence playing the third section again. After only four or five bars Mr Lovell stops them, "stop there, you're playing the right notes but there's no pulse". He sings the repeated syncopated rhythm that is played as an accompaniment to the melody by the trumpet section and the tenor instruments of the band. "Why is the middle crotchet of each bar shown as two tied quavers?" he asks. He receives no reply, so he explains that it is "to show where the middle of the bar is". He goes on

to explain that they need to play the middle crotchet a little stronger than the others "to give the shape". "Of course" he says, with just a hint of irritation "this would be so much easier with the tuba". The band plays the third section of the piece once again. Mr Lovell stops them after they have played about eight bars. "No" he explains patiently "not an accent, just stronger". Mr Lovell sings the syncopated accompaniment the way he wants it played. They play the same section again Mr Lovell singing the syncopated accompaniment rhythm over the sound of the band. Mr Lovell turns to the flute section, "I hope you were listening to that," he says "because your melody sits on top of it". He reminds the flute section that their line is marked 'dolce' before he speaks to the whole band. "Okay, everybody that section" he calls.

The ensemble plays through to the end of the third section and stops. "Okay", says Mr Lovell "that's a gorgeous movement" he pauses for a moment and then adds "well it isn't quite yet, but it will be". "Let's go back to the andantino" he continues "and don't rush the quavers". He turns to look at Denise "what's wrong with the melody?" he asks. "It's got no style" she replies. Mr Lovell smiles and says "that's right, you've got no style". A ripple of gentle laughter follows. As the laughter subsides he adds "well, not you personally, but the melody". He sings the melody, phrasing it the way he wants it played. They play the passage again. Mr Lovell stops conducting after just a few bars but he indicates with a gesture from his hand that the band is to continue playing. He walks away from the band towards the back of the room where stops and listens. Towards the end of the section he moves

forward to the conductor's stand where he takes up direction of the band again with his baton in time to stop the band at the end of the passage.

"Some of that was a lot better" he states, "just a couple of things". Mr Lovell sings a section of the melody and explains why two identically written semi-quaver passages should be played differently. He sings the passage again emphasising the articulation. He pauses briefly on one note "put a tongue on that one" he says before singing the remainder of the phrase "let's hear you play it flutes". "I'd like to be able to play the notes first" remarks Denise a little wearily as she lifts her flute to her lips. The flutes play the melody, making an effort to copy the articulation and phrasing as sung to them by Mr Lovell.

When the flutes have completed the melody Mr Lovell turns to the trumpet section "I want you to try something" he tells them "we haven't got cup mutes so I want you to play into your music stand". He picks up his own trumpet and demonstrates by playing into the conductors music stand. "About that far away from the stand" he says on completing his demonstration, "right, let's try it". The trumpet section plays the syncopated rhythm that forms the accompaniment to the flute melody. Holding the bells of their trumpets a few inches away from the sheet music on their music stands makes the tone they produce muffled and more mellow. Mr Lovell stops them at the end of the passage, "we lost it, we lost it" he says, referring to the syncopated rhythm, "without the tuba playing the first and third beats we lost it" he then asks rhetorically and with obvious annoyance "where's that tuba player?". The

band members sit without speaking or moving as Mr Lovell stares at his score. "We're slowing down" he says raising his eyes to look at the trumpet section once more, "let's try it again from bar eighty-four, slower". The trumpet section plays the passage once more leaning forward into their music stands with Mr Lovell singing the missing tuba notes. He stops them after twelve bars and with a hint of defeat and resignation in his voice says "okay, well done, let's have everyone from bar eighty-four".

The whole band rehearses the passage that starts at bar eighty-four. After several attempts it becomes apparent that it is getting worse rather than improving. Mr Lovell is getting exasperated, "I'm going to get you to play it again" he declares "the problem is you're not listening, because you think it's hard you're concentrating on playing the notes and you've stopped listening to the ensemble. Let's do it again and this time listen to each other, think about the music, not the notes". They commence playing from bar eighty-four once more. The increased tension and frustration that this impasse in the rehearsal is creating is unexpectedly broken when Mr Lovell reaches down for his trumpet in order to play along with the accompanying line played by the trumpet section. As he brings the trumpet up to his mouth the mouthpiece becomes entangled in his clothing and instead of blowing on his trumpet he ends up with his tie in his mouth. The members of the band stop playing amidst laughter at Mr Lovell's predicament. "I was going to put the trumpet part in" he explains rather sheepishly.

The opportunity to laugh at their conductor appears to relax the ensemble members. It also seems to relax Mr Lovell and though they continue to rehearse the same passage it now begins to improve. Musical ornaments, dynamics, phrasing and ensemble are all considered. Mr Lovell pleads with the players on numerous occasions to "listen" and to "concentrate on the music not the notes". The passage is sometimes fractured into single notes while on other occasions expansive phrases are discussed as the blocks of rehearsal, but at all times members are constantly encouraged to focus on the output of the ensemble rather than their own input into the ensemble. As the passage improves and develops there is an almost palpable feeling of increased commitment and involvement from the young musicians in the ensemble. There is discussion over whether there is a fermata in bar one hundred and forty. Several of the ensemble members voice their opinion on this matter and Mr Lovell seeks the advice of other members before ruling that there should be one. They rehearse the last four bars of the piece several times. It consists of a unison rhythm, in octaves, played by all members of the band. Synchrony and intonation are of critical importance and Mr Lovell reminds them that they need to concentrate on the sound produced by the ensemble. As they finish rehearsing the last passage of the piece Mr Lovell praises what they have done. "Now it's starting to sound like music" he tells them "it will be really good in the concert if you play like that, well done". There is pride around the ensemble at their achievement.

"Okay" calls Mr Lovell after a few moments of silence "Phantom of the Opera". This is the band's other contribution to the forthcoming music centre concert. As the

sheet music is found and placed on music stands there are murmurings of unease on the flute section. They have had problems with the opening few bars of this piece at the previous two rehearsals. While it is not technically difficult to play it requires accuracy of intonation, particularly in the lower register. Denise asks Mr Lovell if he will tune the flutes once again before the band commences rehearsing the piece. Mr Lovell says that he will and explains that tuning is something that will change constantly during the course of a rehearsal or a performance and that they should always be listening to it and making necessary adjustments. After he has tuned the flute section he calls the ensemble to order and they begin to play. The flute intonation is awful and the ensemble stops after only a few bars with some giggling and turning of heads towards the flute section. "Can we tune again?" asks Denise "I think it might be me, perhaps if I don't play". "Its not just you" replies Mr Lovell "its all of you, you're all panicking". "You're all worried that its going to be wrong, your embouchures are tightening and that is bending the notes. Relax, and it will be fine". The flutes don't look very convinced. Denise asks if the band could start the performance at rehearsal mark A, thereby avoiding the opening few bars. "No, come on flutes you can do it" says Mr Lovell encouragingly. "I want you to play that first bar over and over again". As the flutes repeat the first bar Mr Lovell offers advice and to some extent distracts them from what they are doing. After a few times of playing the opening bar the intonation begins to settle down. Mr Lovell stops them "there you are you can do it" he tells them. Members of the flute section still look unconvinced.

"Okay, everybody from the beginning" commands Mr Lovell. The flute intonation is better but still not good, however; no one makes disparaging noises or turns to look at the flute section. There is an atmosphere of patient support. Mr Lovell continues to conduct the ensemble through the introduction as if all is well. Towards the end of the introduction, as the music slows into the next section the alto saxophone player fails to slow with everyone else. Despite his best efforts Mr Lovell is unable to catch his eye so he stops the ensemble. He addresses the alto saxophone player, "Ralph, raise the height of your stand so that you can see me and your music". This Ralph does in the way that only a fourteen-year old boy can, as if he has been asked to do the most unreasonable of things. "Now can you tip your baseball cap back a bit" continues Mr Lovell "as I can't catch your eye when I need to". They start again from a few bars before the rallentando, Mr Lovell makes a point of catching Ralph's eye as he slows the tempo and this time Ralph slows with the rest of the ensemble.

As the ensemble plays on into the next section of the music the double doors at the back of the ensemble open and a boy enters pulling a large tuba case on wheels behind him. He makes his way across the back of the ensemble to the end of the trombone section where he removes the tuba from its case and takes his seat. William has arrived. He sits with his tuba resting next to his chair on the floor. At the next cadence Mr Lovell stops the ensemble. "William, thanks for coming" he says sardonically. William offers an apology "yeah, sorry I'm late I had to do something". "And will you be joining us for the concert?" asks Mr Lovell "er, yeah" replies William. "You'll need this" Mr Lovell says as he passes the tuba music folder

to the principal clarinet, it is passed back through the band to William. "Thanks" replies William, and then as a bit of an after thought "sorry". The band members sit quietly for a few moments while William finds the appropriate sheet music and places it on his music stand. "Okay, now we've got a tuba let's start from the beginning again" says Mr Lovell.

There is only twenty minutes of rehearsal time remaining however, the detailed work done before William's arrival and the addition of a confidently played bass line allows for lengthy passages to be played without the necessity to stop. Indeed, the band sounds fuller and more confident now and when it is necessary to stop, Mr Lovell talks about interpretation and performance rather then about detail or correction. On reaching the end of Phantom of the Opera Mr Lovell says "right, let's have another look at the Borodin Festival. There isn't time to rehearse it so we are going to run straight through it, it will be a performance". The ensemble plays A Borodin Festival from start to finish. Passages that were causing difficulty earlier in the rehearsal now seem to pass without a problem. The syncopated accompaniment that had so troubled the trumpet section, now, with the addition of the tuba notes, flows easily. Of course, the improvements heard in this performance are not simply down to the addition of the tuba line, the intensive and detailed work done by the ensemble, particularly in the middle period of the rehearsal was now being drawn together and heard holistically for the first time.

As the band reaches the end of the piece Mr Lovell's pleasure at the improvement is obvious "that's really good, that's very good indeed, well done" he says "now, the concert". He spends the final few minutes of the rehearsal explaining to the ensemble members the logistical arrangements for the evening of the concert. "Okay" he says in conclusion "good rehearsal, well done". As the band members fold down their music stands and begin to disperse Mr Lovell can be seen walking over to have a word with William.

Chapter Five

SETTING, CONVENTIONS AND PROCESS

Introduction

Members of an ensemble join together with the shared aim of making ensemble music, that is, a musical experience that requires two or more individuals as participants. The product of the enterprise of ensemble is performance, whether for an audience or for the ensemble members' own enjoyment. Rehearsal is the pathway to performance that may, or may not, take place in a formal setting, with or without an audience. It may even take place in segments, as completed sections of music become performance during rehearsals. In this definition of performance there is no clear divide between rehearsal and performance. Rehearsal becomes performance at the point when the music becomes a shared and collaborative enterprise. This is a much wider definition of performance, and by implication a narrower definition of rehearsal, than that which is usually inferred. This definition does not confine performance to public exhibition, nor does it see performance as a conclusion or destination but rather as an experience shared by ensemble members. It is the skills required to turn rehearsal into performance that are learnt, developed and used in ensembles.

There are three underlying themes to this explanation of how young people in MLP ensembles acquire and develop the skills required for ensemble membership. These will be considered more fully in Chapter Six, however, it may be helpful to state them here. Firstly, that ensemble membership is predicated on both musical and social participation, on the musical and social interaction of members, and that the learning and skill acquisition achieved in an ensemble is rooted in, and reliant on, participation. Secondly, that there are varying levels of participation within an MLP ensemble, and that the novice's or newcomer's participation in an ensemble commences as peripheral and becomes increasingly central as they learn the necessary skills. Thirdly, that the performance achieved within, and through, an ensemble is collaborative realisation of musical intention and that this is both negotiated and shared by ensemble members.

In order to analyse and understand the processes that create and enable learning within an MLP it is first necessary to describe the settings in which this learning takes place. It is also necessary to establish the nature and purpose of MLP ensembles and to examine how they rehearse. This understanding is best achieved by exploring the rituals, conventions and practices that structure ensemble rehearsal and by examining the pathways and criteria that structure pupil's progress through an MLP. These explorations also need to consider the opportunities an MLP offers to a young musician to acquire and develop ensemble skills as well as the process by which pupil progress and development is monitored.

Setting

MLP ensembles provide an unusual setting for learning, they are vehicles for skill acquisition and musical development and, at the same time, enjoyable and social occasions. As MLP ensembles do not form part of the statutory curriculum or happen during the school day they need to be fun and enjoyable if young people are to commit their time to attending. The fabric of ensembles is in some ways quite unique and in other ways common and instantly recognisable. It is an easily identifiable thing yet there is little that is tangible or permanent. An ensemble is a setting that is reliant on social structures and interactions rather than physical surroundings or placement. The ensemble remains discrete and intact regardless of its placement. It is, however, reliant on geographical proximity. Ensemble members must come together in order to create the ensemble. While many ensembles have permanent homes or are part of a readily identifiable institution, some even taking their name from their physical placement, no particular placement is required for the ensemble to function. A football team may be located in a community but the team can play the game on any suitably sized firm and flat surface. Like a football team an ensemble may be located in, and even draw its membership from, a particular community but the ensemble can rehearse and perform in any suitable space. Ensemble is in the activity and the musical and social interaction and not in the placement.

Ensemble is however, reliant on artefacts and history to sustain its existence. History and artefacts not only constrain but also direct the development of the ensemble. For

example, a wind band requires brass, woodwind and percussion players with their instruments and for the players to perform from the wind band repertoire. This repertoire forms an historical, aural and documentary record that shapes the nature and purpose of the current wind band, as well as being the starting point for the future of the wind band. The history of an ensemble type recorded in the form of notated compositions and in the historical progress of ensemble specific writing, constrains an ensemble but also provides a springboard for its future development. Similarly, the recognisable history of musical interpretation is not only a constraint on musical performance and interpretation, but is also a resource to be used in the production of new musical meaning. Social history is also an important factor in an ensemble. While all types of specific ensembles share defining characteristics that make them the same, the membership of each consists of people with different skills, understanding and expectations that combine to make each ensemble unique. The social history of the ensemble and the individual and shared experiences of the members provide constraint, structure and future direction to the ensemble.

Ensemble artefacts take the form of musical instruments, mutes, music-stands and notation. These artefacts constrain and direct the musical range and style of the ensemble. Musical instruments have practical working ranges, to require performers to play outside of these would present the performer with difficulties that are probably insurmountable. This, of course, does not mean that these boundaries are not, and should not be, pushed and challenged. The physical restrictions of each instrument bring limitations on its use or the particular notation and style that is

demanded of it. For example, producing a glissando on a clarinet is a very advanced skill, however, an absolute beginner can produce a near perfect glissando on a trombone. The textural and physical properties of the instruments in an ensemble constrain the sounds and repertoire available to be used. A wind band cannot be made to sound like a string orchestra because the timbre and acoustic boundaries of wind instruments are different to those of string instruments. Mutes can alter the sounds that instruments produce but time is needed to place and remove. Musical notation gives access to repertoire and performance music, the life-blood of an ensemble, however, it is in itself limiting. For example, it is not possible in standard Western notation to write intervals of less than a semi-tone.

Membership

The experience of membership is not uniform. It is experienced differently by each ensemble member according to which instrumental section they play on, their spatial relationships to others, their level of contribution and participation, their individual technical skill level and their personal history and expectations. In *Vignette 1* (Ch 4: 76-86) the experience of membership for Jody and Chantel was very different to that experienced by Tim and Jonathan. The greater level of technical and ensemble skills possessed by Jody and Chantel enabled them to participate more confidently in the rehearsal than Tim and Jonathan, whose participation was less assured. The individual technical skill level of these young violinists ensures that their experience of ensemble membership is different. Ensemble membership is reliant upon participation. The individual cannot claim ensemble membership by declaring

allegiance. Simply stating membership is not sufficient. Similarly the individual cannot achieve ensemble membership by social category. For example, being a string player does not confer string orchestra membership. Ensemble membership requires active participation in negotiated performance.

Each MLP ensemble is situated in the social nature of the group as much as it is within the musical nature of the ensemble. Social and musical relations between members are constantly developing and changing giving each ensemble a constantly changing focus. While no single individual or relationship is more important than any other, some individuals, particularly the conductor and in more senior ensembles the principal players, have a greater influence and impact on both the social and musical direction of the ensemble. The influence on ensembles of an authoritative figure such as a conductor, or the control of an institution such as a music service is important, however, it must be understood as mediated by a particular ensemble. The change of an ensemble conductor or the leader of a music centre impacts directly on the ensemble and its membership. The behavioural expectations of ensemble members are set by the conductor either through actions or conversely through inaction. The behavioural expectations of the ensemble conductor are influenced by the overall behavioural expectations set by the leader of the music centre, again either through action or inaction.

The constant negotiation of musical and social relationships within an MLP ensemble can be subject to a step-change each September when newcomers join and 'old-

timers' move on to more senior ensembles. Relationships shift in a cascading process up and down the MLP. Relative newcomers become old-timers. Last year's intake now help the new entrants. Ensemble members form new identities from their new perspectives. These changes can be very encouraging or unsettling. They can reveal progress and development that has remained unnoticed; the newly created old-timers suddenly see all that they have learnt as a novice because they are in a position to pass that knowledge on to another member. However, this new status can also create demands; suddenly the longer serving member is looked up to and expected to know more than they are perhaps sure they do.

What creates an ensemble is mutual engagement and participation, but mutuality in an ensemble does not entail homogeneity. What makes an ensemble both possible and productive is as much to do with diversity as homogeneity. Ensemble members are not all from the same class, year group or school. Some are good at the sciences, some at the arts, some love sport, some love dance, some are extrovert and some are shy. They all have different aspirations and concerns. However, they play together regularly, interact on a personal and musical level and they directly influence each other's musical learning. Not only is each ensemble member different to start with but making music together creates differences as well as similarities. The engagement and participation of Jody and Chantel in the Junior String Ensemble (Ch 4:76-86) and the status of the two resulting from their levels of engagement and participation is different to that experienced by Tim and Jonathan. Likewise, the levels of engagement and participation and the resultant status afforded to Mrs

Barlow and Mrs Green is different to that of Jody and Chantel and Tim and Jonathan. However, each is engaged and participating in the ensemble. Each is an influential part of the whole. Each ensemble member finds a place and gains an identity, which is both further integrated and further defined in the course of the process of engagement and participation. These identities become interlocked and articulated with one another through mutual engagement and participation in an ensemble.

Mutual engagement and participation does not imply equality of influence. The social structure of MLP ensembles is strongly hierarchical. The overwhelming amount of verbal communication and musical direction during all the rehearsals observed in this study came from the ensemble conductor or leader (Vignettes 1& 2, Ch 4:76 & 87). This is not surprising given the huge disparity of musical experience and musical knowledge, particularly in more junior groups, between the ensemble members and the ensemble conductor. There is also the differentiation of role between the players and the conductor, with the latter's role largely focused on interpretation and realization. Mutual engagement and participation is required of all ensemble members though the level of direct influence they exert on the ensemble will vary considerably.

Membership of an ensemble is not something that is restricted to the time that is spent in rehearsal or performance. Even when an ensemble member is not actively engaged in making music with the ensemble they are still members of the ensemble, though of course, as Wenger (1998:57) states 'that time of intense engagement with

their work' (in this case the work of ensembles) 'and with one another is especially significant'. He goes on to suggest that 'their participation is not something they simply turn off' (ibid:57) when not actively participating in ensemble. The experiences they gain will surface in other areas of their lives. For example, when they are listening to music or participating in other group activities these experiences will be informed by ensemble membership. Membership of an ensemble becomes part of the individual's whole identity and is not turned on and off to coincide with rehearsals and performances of the ensemble.

Jody's (Ch 4:76-86) commitment to Junior String Orchestra was both musical and social. Though her violin teacher had suggested that she might move up into the Intermediate Youth Orchestra in the following September (ibid:77) Jody was hoping to spend another year in Junior String Orchestra. This was for both musical reasons, she hoped to have an opportunity to play first violin, and for social reasons, her friends were all in Junior String Orchestra. The interweaving and interdependence of the musical and the social in an ensemble can be seen in Jody's and Chantel's effortless segueing between musical interaction within the ensemble and social interaction with each other and other ensemble members. Musical interaction as required by ensemble is facilitated by, and is an extension of social interaction between members.

Crossing Boundaries

When considering the social nature of ensembles it must be remembered that ensembles are not free-standing communities, they do not exist in isolation. They exist within, and are part of a wider community that includes other ensembles in the music centre, local schools attended by the young musicians and the greater local community. Ensemble members constantly interact with this wider community and therefore this wider community to some extent shapes the ensemble. There is also cross-pollination between individual ensemble members; the boundaries between them are crossed through shared artefacts, shared rehearsal rooms and facilities and shared repertoire. Boundaries are also crossed through multi-relationships; connections between ensembles are provided by people who can introduce elements of practice from one ensemble to another.

Learning Environment

An ensemble is a different learning environment to that usually experienced by pupils. Much teaching and learning happens in abstraction. Matters are explored outside of the setting in which they will be used. Knowledge acquired in this way has to be memorised for later application in a 'real-life', and often considerably removed situation. The learning that takes place in MLP ensembles is not abstract or theoretical but is situated and practical. The knowledge acquired in an MLP ensemble is immediately pertinent and consequential. It is the product of experience and therefore immediately relevant. Abstract learning is observation, discussion and exploration out of context. However, situated learning is experienced and lived and,

by nature of the fact that the learner is situated in the setting, has to fill the senses and derive knowledge from many subtle and unobserved cues and happenings within the context and situation. Learning in an ensemble is intrinsic to participation in the activity of ensemble. An ensemble rehearsal is not merely a context for learning something else. Participation in the rehearsal is both the pathway and the destination. What is learnt is not static subject matter but the very process of participation in and the negotiation of musical ensemble realisation.

To the casual observer the setting could be seen as a social rather than learning environment. It may appear that team membership and social co-operation are both the obvious, and intended, purpose of the ensemble. Of course that is not to suggest that team and social skills do not have value, or do not have to be learnt, but the actual purpose of these ensembles, the acquisition and development of ensemble skills, is not readily apparent. Learning aims are rarely stated at the outset of rehearsals and learning outcomes are never tested in any formalised or methodical way. Indeed, conductors of ensembles, when interviewed do not discuss rehearsal planning in terms of learning objectives but rather in terms of ensemble performance outcomes. Results are based on the quality of ensemble performance, i.e. on collective action, though there is no formal mechanism for measuring this. Opinion about relative performance levels is subjective and influenced by many factors including the historical, the technical and the expectation. The individual performance is only a contribution to the whole, and it is the whole that is assessed.

Membership of an ensemble is about cohesion and using skills to create a whole. The overall outcome is not irreducible to the actions of a single, participating individual. It is not produced by an individual 'maker' but by a composition effect of everyone's doings. Consequently there is no reporting on individual pupil progress, as would be the norm in a classroom or instrumental lesson. Progress is not reported either formally to a parent or guardian or directly to the student during the rehearsal. Individual progress is viewed by both teachers and pupils in terms of promotion to the next ensemble in the pyramid.

Unlike the approach to teaching that is often the norm in institutional environments, individual players are not ranked by individual results after a performance, as they would be at the end of a test in class. Therefore individual 'success' or 'failure' is not measured or trumpeted as it is not sought, because the success of the whole is the success of the individual (see McDermott 1996:293-295). However, an ensemble is not a chain. It does not reflect the standard of the weakest link. Indeed weakness within an individual's musical skills can often be balanced or supported by complimentary strengths in the skills of other members of the ensemble. William, the tuba player in Senior Concert Band has a positive affect on both the sound of the band and on the confidence of the other players (Ch 4:95). Though his part in the ensemble is rarely as technically demanding or requiring of as much dexterity as some other parts, he brings to the ensemble confidence and assurance which creates a firm foundation on which the others build. When he is absent from the ensemble

simple passages and rhythms become insecure and uncertain. The un-sureness of some ensemble members is balanced and complimented by the confidence of Peter.

When pupils are taught individually or in small groups in their instrumental lessons they individually give the focus to the learning. If the individual has a specific area of technique that requires attention or is having difficulty with a particular piece, or section of a piece, these drivers will, to some extent, provide the focus and direction of the teaching and learning. In an ensemble it is the social group that provides the focus and direction as opposed to the individual. This focus may not necessarily represent the focus of one, or any of the group members but is the focus required by the ensemble itself.

Membership of a musical ensemble requires a certain level of instrumental technique and musical knowledge. However, technique and knowledge are only the tools by which access to the ensemble experience is gained. Mutual engagement and participation involves not only the individual's competence but also the competence of others. The ensemble relies on what the individual knows as well as the individual's skill to connect meaningfully with the contributions of others. In a sense full engagement and participation in an ensemble is inherently partial, it involves complimentary contributions. The input of the individual is only ever part of the whole. It is also true that an ensemble contains largely overlapping knowledge and skills. Hutchins (1996:48-51) describes how knowledge can be distributed across a social system. He discusses the idea that not all knowledge belongs to the

individual. This could be applied to ensembles where the individual does not hold all the knowledge required to perform the music but does hold part of it.

Conventions

As with any human activity there are conventions, rituals and practices associated with ensemble rehearsals and performance. These not only impose structure on rehearsals and performances but also emphasise inclusion and membership. They are important both socially and musically. Conventions offer a shared starting point and a commonly shared direction. They provide channels for communication and allow assumptions to be made about the intentions and behaviours of others. They facilitate interaction and understanding. They allow progress by offering solutions to problems. Ensemble members do not have to invent processes to over-come each problem, as there are successful solutions already in place. Conventions can also be used as a 'rite of passage'. The individual becomes a full member of the community when he or she behaves according to the conventions. Some conventions are explicitly and rigorously policed. Others go un-stated, but are none-the-less guarded by members of the ensemble.

What follows is an extract from an observation of the Intermediate Harmonium Group:

201 Mr Singh asks Gurjit to play a tune the ensemble had learnt a few weeks earlier.

202 Gurjit commences playing using a trumpet voicing on his electronic keyboard. He tries, unsuccessfully, to change the voicing halfway through the melody and the playing becomes confused.

203 Mr Singh stops Gurjit and asks him to start again. He suggests that Gurjit could be freer with the melody line.

204 Mr Singh demonstrates to Gurjit by playing the melody with rubato on his own keyboard.

205 [Mr Singh to Gurjit] *"you must listen to the instrument you are using and feel the sound"*.

206 [Mr Singh to the whole ensemble] *"let's play it together"*.

207 They begin to play but Mr Singh stops them after only a few bars as it is clear that some are playing the wrong melody.

208 Mr Singh listens to each member of the ensemble in turn checking that they can remember the beginning of the melody and correcting some who have incorrectly adjusted the transposition on their keyboards.

209 The ensemble begins playing the second melody again.

210 Some members of the ensemble are playing from some form of notation variously concealed on their knees and half-tucked underneath keyboards.

211 Indrani,who is not using any form of notation, carefully watches the fingers of Gurjit and Harry while they are playing.

212 On successfully playing through the melody Mr Singh asks them to do it again and this time he provides an accompaniment on the tabla and provides harmonic support using the automatic chord sequencing on his electronic keyboard.

213 After about 36 bars Mr Singh, unable to hear the automatic chord sequencer begins to move at slightly different tempi to the rest of the ensemble. As a result the ensemble is unable to stay together and they stop playing.

214 Mr Singh switches off his chord sequencer and speaks to the ensemble, *"is anyone using sheets?"* he asks.

215 Raj admits that he was, though others who were also using sheets remain silent.

216 Mr Singh again addresses the whole ensemble while pointing to the melody the ensemble had learnt earlier in the rehearsal, which is notated on the white board *"good let's do this again, can you remember it?, good"*.

217 Mr Singh rubs the notation off the board.

218 They play the melody again with Mr Singh accompanying them on the tabla.

219 [Mr Singh to all, on finishing the new melody] *"so there you are, you can play the tune without using the notes"*.

Mr Singh insists that Asian music should be passed and retained aurally and should not be notated. However, the tendency of Western educated students appears to be towards a reliance on notation of some form. Mr Singh acknowledges this in his practice of notating a new melody on the white-board as an aid to the initial memorising of the melody, but after this has been achieved Mr Singh constantly reminds the ensemble members that they should not be using any form of notation. However, the young musicians continue, often clandestinely, to use various forms of notation and written scripts. Mr Singh constantly and rigorously reinforces the need for aural, rather than written retention, a convention of Asian music making that he guards vigorously.

Specialist Language

In ensembles, as in many other areas of musical activity, there is a great deal of specialist language used. This language may refer to musical instruments and their component parts, or to the playing of the instruments, either technically or musically.

It may also refer to the music itself, for example, the use of Italian words or phrases to describe mood, tempo and articulation. Specialist language is also used to refer to the ensemble and the process of rehearsal. In junior ensembles conductors and tutors are very careful when using technical language and explain its meaning in simple terms. The following is an extract from an interview with Mrs Barlow, the conductor of Junior String Orchestra:

G.C. How much technical language would you use with a junior ensemble, and how would you introduce new technical words to them?

Mrs B. Well you usually find that at the junior stage they don't know a lot of technical language, they don't know a lot about dynamics, what the words even mean so you have to spend a little time introducing those, explaining how you make those things. If you want them to play piano or forte its no good just saying play soft, play loud they need to know how to do these things, whereabouts to put the bow, its the same with crescendos and diminuendos, I mean they don't know what those things mean, they've no idea, so yes you need to explain all that to them quite clearly.

G.C. In tonight's rehearsal I think you introduced col legno.

Mrs B. Yes, col legno and there was pizzicato as well.

G.C. Once you've introduced those words do you then make a conscious effort to use them.

Mrs B. Oh yes, I always use those words once I've introduced them and I try to make the children use them as well.

However, as pupils progress into more senior ensembles there is an assumption of knowledge and understanding. While increasingly complex terms are used in senior ensembles they are rarely followed by explanation as understanding is assumed. However, when questioned after rehearsals, some members of senior ensembles could not define commonly used words like 'allegro' and 'dolce'. There appears to

be a belief among young ensemble members that technical language particularly that which is written, is unimportant to the performance of the music. The understanding and subsequent realisation of technical instructions were viewed by many of the young people in this study as the responsibility of the conductor. Not only was the language used in senior ensembles more technical but it also assumed greater awareness among the young instrumentalists of what their musical line or instrumental sections within the ensemble are contributing.

At a senior level more use is made of terminology that is exclusive to musicians and particularly musical rehearsals. The following is an extract from an observation of the Senior Concert Band:

04 [Mr Lovell turns to the flute section] *"let's hear the flutes"*.

05 The flute section commences playing from the beginning of the piece.

06 Mr Lovell stops them six bars after rehearsal mark 'B'.

07 [Mr Lovell to the flute section] *"at B don't make the B flat stick out, right, from A, I'll drop into one-in-a-bar after about four bars"*.

08 The flute section commences playing from rehearsal mark 'A'.

09 Mr Lovell stops the flutes just before they reach rehearsal mark 'C'.

10 [Mr Lovell to all] *"everyone from A now"*.

In line 07 Mr Lovell tells the flute section that he will "drop into one-in-a-bar after about four bars". He is informing the flute section, and by implication the whole ensemble that he will move from conducting three quick beats in a bar to conducting a single slower beat in each bar. This is often done during or after an acceleration in

tempo. This terminology is peculiar to musicians and particular to musical rehearsal. The use and meaning of phrases such as this has to be acquired by the young musicians as they progress up the MLP.

The Use of Language

In advanced ensembles complicated concepts and detailed instructions can be conveyed by very short, and even single word, communications. There is the use of verbal 'short-hand'. Sentences and passages of speech have large sections 'bracketed' out, the missing words are implied but not spoken. The use of this 'bracketed' language helps maintain rehearsal pace and it also confirms membership. For example; 'from the top' means commence playing from the beginning of the piece of music, or 'B' means commence playing from rehearsal mark 'B'. 'D after 2' means commence playing from rehearsal mark 'D' after I have counted out loud, at the tempo you are to commence playing, 2 pulses. This last example also assumes that the players are aware that they follow on from the count in time commencing on what would be the third counted pulse. There is also use of internal or exclusive language with words such as 'top' replacing 'beginning' in the first example. In *Vignette I* (Ch 4:80) Mrs Barlow issues the instruction "right from the top, three, four". Here she is instructing the Junior String Orchestra to commence playing from the beginning of the piece and then she goes on to call out the third and fourth beats of a bar to indicate tempo and the point of commencement. As a member of the ensemble the individual understands and uses, along with other ensemble members, a language that is specific to that context making participation exclusive. For

example, wind band players speak of 'losing their lip' or of 'needing a bumper' while string ensemble players speak of 'snap pizzicatos' and 'retakes'.

As pupils move up the MLP their knowledge of the specialist language and the use of 'bracketed' communications become more frequent and more complex in its content. Although it must be remembered that more bracketing does not necessarily mean less precise. Indeed, the fact that so much of a communication does not need to be explicit because of the shared understanding and experience, because of the 'situational sense', could indicate that the communication is indeed more representational and less open to misinterpretation by ensemble members.

Representational versus Non-representational

Ensemble rehearsals produce a conflict between language and notational interpretation. The use of representational language and notation and the non-representational outcomes is never explicitly stated, but this dichotomy was present in all MLP ensemble rehearsals observed. Conductors and tutors constantly remind the young performers that the reading of notation must be accurate and precise and that there is no room for inaccuracies or deviation. They are also constantly reminded that good ensemble playing must 'flow', must have subtle nuances and rubato. However, the indicators for when they must interpret in a representational way and conversely, when they must interpret in a non-representational way were not explicit.

There is also a contradiction between the requirement of pupils to read the notation in a representational way while on the other hand they are being guided or directed through this process of improvement and refinement by increasing non-representational language. The reading of musical notation requires a representational approach, it needs to be very literal and precise. Each player must reproduce the read or memorised notation in sound as accurately as possible in order to synchronise their musical line with that of others. However, some of the 'situational sense' associated with reading musical notation is contradictory and confusing. While precision and accuracy are sought from the individual in the reading and synchronisation of the sounds, the interpretation of the music requires a non-representational approach from the ensemble as a whole. The subtleties of period, style and genre require a relaxation of a strict representational playing. This juxtaposition between the representational and the non-representational is compounded by the language and communications of conductors and ensemble leaders who predominantly rehearse junior ensembles to be representational in their reading or recalling of musical notation.

However, analysis of the data in this study suggests that the expectation of conductors and tutors is that the reading or recalling of musical notation will become increasingly more representational and accurate on an individual level, while becoming increasingly more non-representational at an ensemble level as the pupils moves up the pyramid. In the Senior Concert Band rehearsal Mr Lovell insists that the syncopated rhythm played by the trumpet section and the tenor instruments of

the band is read and played accurately (Ch 4:88-89). He demands a representational reading of the passage. However, a little time later he describes to the flute section how he requires two identically written semi-quaver passages to be played differently (ibid:78). His requirement here is for a non-representational reading of the musical notation, a reading that is informed by the stylistic demands of the music. This reading is rooted in 'situational sense' that 'brings the music to life' and gives it shape and meaning.

The Process of Rehearsal

The rehearsal is a forum in which the aural imaginings and constructions of the composer or originator are realized, negotiated and reconstructed by the ensemble members in order to create performance. An ensemble rehearsal is a busy and, on occasions, noisy environment. At times it can appear chaotic and even unstructured. However, analysis of the data in this study suggests that rehearsals do conform to a framework. Though the interactions and activities that together form a rehearsal are varied and numerous, analysis of the data suggests activities during rehearsal fall into one of five modes. These categories may not be exclusive to ensemble rehearsals, a similar process may equally apply to the learning and rehearsal of musical pieces in an instrumental lesson. What is being explored is the framework of rehearsal, rehearsal forms and integral part of musical practice in all its settings. These five categories form a typology that provides a descriptive and explanatory framework of rehearsal explored through ensemble. These five rehearsal modes are:

1. Exploration

2. Reaffirmation

3. Instruction and modelling

4. Synchronisation

5. Administration

Exploration During 'exploration' the ensemble 'plays-through' a new or relatively unfamiliar piece of music. The aim is to 'keep-going'. The music is not stopped because of errors or poor synchrony. It is a process in which the ensemble members learn about, or gain understanding of the music by 'having-a-go' and experiencing the whole. In Vignette 1 (Ch 4:81-82) Mrs Barlow introduces the ensemble to 'The Tunes from Shakespeare's England'. Her intention is to enable the young players to experience the whole piece by playing it all the way through without stopping for correction or rehearsal. She tries to help them avoid any obvious pitfalls by ensuring that everyone has noticed and understands the implications of the key signature; by asking Mrs Green to play the opening section to them and by giving a brief description of the form of the music explaining how it is constructed. She then has them play the theme before stating that they were going to "try to play it all the way though". Her aim was to enable the orchestra members to hear the music in its entirety before commencing a more segmented and detailed rehearsal of the piece. Exploration is used as a method of introducing new music to an ensemble that will later be rehearsed more thoroughly. It is also used as a

technique for developing sight-reading skills, and in more senior ensembles as a method of exploring repertoire.

Reaffirmation During 'reaffirmation' the ensemble 'plays-through' a previously rehearsed piece of music. The piece of music may, or may not yet, be of an exhibitionary performance standard but reaffirmation confirms and re-enforces previous knowledge. It allows the ensemble members to reacquaint themselves with the music. Reaffirmation of a piece of music is sometimes undertaken prior to its segmented and detailed rehearsal. Sometimes reaffirmation of a piece of music is not followed by rehearsal of the piece but affirmation is used to keep a piece of music 'fresh' in the performer's minds for use in future exhibitionary performances. On occasions it is simply used for the enjoyment of the ensemble members at the beginning or end of a rehearsal, when they 'play-through' a familiar piece of music as a reward or relaxation. In the Junior String Orchestra rehearsal described in *Vignette I* (Ch 4:84-85) Mrs Barlow reaffirms 'Old Joe Clarke' by playing it through at the end of the rehearsal. Her purpose was to reinforce the knowledge acquired during detailed rehearsal of the piece earlier in the rehearsal and also to provide reward or relaxation, particularly for Jody and Chantel.

Instruction and modelling During 'instruction and modelling' the conductor, a tutor or another ensemble member gives the ensemble members verbal directions about the playing and performance of the piece and model passages and phrases by way of demonstration. Errors are corrected and phrases are demonstrated and

mimicked. Many stylistic features of a piece of music are easily understood if modelled by the conductor or a senior player. This modelling may be done by using the voice or an instrument. In Vignette II (Ch 4:90) Mr Lovell "sings a section of the melody and explains why two identically written semi-quaver passages should be played differently" he then "sings the passage again emphasising the articulation". Mr Lovell was using modelling and instruction to illustrate the same interpretative point; he models the melody by singing it, explains verbally why he wants it played that way and then reinforces his point by singing the phrase once again emphasising the articulation he requires. In senior ensembles it is expected that essential elements used in modelling a particular phrase of the music will be used to inform the playing of other phrases during the same piece or passage. It is assumed that members of senior ensembles will take the stylist implications of a modelled phrase and use that to inform the style throughout the passage or piece. The matters for direction and correction in senior ensembles move away from simple note correction and placing entries accurately, as found in junior ensembles, to more difficult and elusive matters such as intonation, ensemble, shape and balance. While these matters are also present at a junior level they become more overt and are given greater prominence and importance in more senior ensembles.

During 'instruction and modelling' there is the assumption on the part of the conductors and tutors that the musicians understand the connection between the musical line they are playing and that of others, and also, to some extent, understand the relationship between them. There is also the assumption that the ensemble

members can connect a part, that is not their own and is played in abstraction, with their own. In *Vignette II* (Ch 4:88-89) Mr Lovell rehearses a syncopated accompanying rhythm with the trumpet section and the tenor instruments of the band. On completing the rehearsal of that line in isolation he turns to the flute section and says, "I hope you were all listening to that flutes because your melody sits on top of it". He had the clear expectation that the flautists would be able to project the implications and outcomes of the rehearsal of the syncopated accompaniment onto their playing of the melody line.

Synchronisation During synchronisation the focus of the rehearsal is on the ensemble members 'playing together', the synchronisation of individual and sectional parts with other parts of the score. The focus is on communal output rather than individual input. The ensemble supersedes the individual. Levels of dynamic are negotiated and agreed. Articulations are negotiated to reflect an agreed approach to performance and the balance between the strengths of different musical lines is negotiated and agreed. The individual must synchronise their part with those of other players to create a greater whole. In *Vignette II* (Ch 4:91) Mr Lovell's mishap with his tie appears to relax the ensemble members and creates a change of dynamic within the ensemble. Mr Lovell takes the opportunity created by this change to focus the players' attention on "dynamics, phrasing and ensemble" and encourages the young musicians to "listen" and to "concentrate on the music, not the notes". He constantly encourages them to "focus on the output of the ensemble

rather than their own input into the ensemble". This period of the rehearsal was in the synchronisation mode.

Administration Finally there is an 'administration' mode. When in this mode registers of attendance are completed, instructions and information regarding forthcoming exhibitionary performances are disseminated and other administrative and organisational matters are pursued. At the end of the Junior String Orchestra rehearsal in *Vignette I* (Ch 4:85) Mrs Barlow struggled to get the rehearsal into an administrative mode. The orchestra members are aware that the rehearsal is about to end and as soon as they finish playing 'Old Joe Clarke' they "begin to talk loudly and start to pack way the equipment". Mrs Barlow has to raise her voice and ask for silence several times before she is able to take the rehearsal into an administrative mode in order to remind the orchestra members that there was no rehearsal the following week.

What this typology provides is a descriptive and explanatory framework of rehearsal. It describes the five elements which are used in the process of rehearsal. A single rehearsal does not necessarily contain elements from all five categories. Indeed, it is possible to conceive that a rehearsal may remain in one mode throughout its duration. For example, an entire rehearsal may be dedicated to exploring new repertoire. On other occasions a rehearsal will move from one mode to another quickly and frequently. For example, a conductor may correct the playing

of a note or a phrase and then immediately address a matter of synchrony. However, all these five elements can be observed within the process of rehearsal.

Rehearsal Trajectories

Ensemble rehearsals are the framework through which pieces of music, previously unknown to ensemble members are learnt, interpreted and transformed into performance. The passage of a piece of music from when it is first introduced to the ensemble through to an exhibitionary performance may appear somewhat random and, to some extent, dictated by the demands of each individual piece of music. However, analysis of the data in this study suggests that all pieces of music, in all ensembles, follow a similar rehearsal trajectory. This rehearsal trajectory contains four elements:

1. Familiarisation
2. Instruction and modification
3. Synchronisation
4. Performance

Familiarisation During the 'familiarisation' element of the trajectory the players read or learn the sequence of notes. They internalise the notation. Familiarisation could be expressed as the internalisation of the composer's or originator's intentions. The composer or originator is the person whose composition or arrangement is printed on the sheet music or whose intentions are taught by rote. The young musicians 'auralise' in their minds the sound intentions of the composer

or originator from the notation or by memorising. They also read or learn the structural 'geography' of the music, where sections of the music are repeated and if there are any directional signs. For example, a coda sign, which may require them to move to another point in the music. Familiarisation could also be the end result of improvisation by an individual or the group. What is important is that the individual turns a structure and note sequence, agreed or accepted by the ensemble members, from an abstract notion into a meaningful internal sound.

Instruction and modification During the 'instruction and modification' stage any persistent errors are corrected, this includes the mis-reading of notation, mis-pitched notes and incorrect rhythmic patterns. Also at this stage any required restructuring is undertaken. For example, it may be decided that a repeated section is played only once. A section may be abridged or a movement left out. This restructuring element may be introduced at any stage during the rehearsal tradjectory, or may not be required at all. In *Vignette I* (Ch 4:79) Mrs Barlow coaches the Junior String orchestra through the instruction and modification phase of a rehearsal trajectory. The orchestra members are practising an arrangement of the American folk song 'Suzanna'. Mrs Barlow reminds the 'cellos of the key signature and the need to sharpen the notes F, C, and G. She indicates to the violins the bowing she requires and corrects the playing of a rhythm by the second violins. During this period of the rehearsal 'Suzanna' is in the instruction and modification stage of its rehearsal trajectory.

Synchronisation During the 'synchronisation' element of the rehearsal trajectory the musical part or line, corrected of any errors of pitch, note value and rhythm, are synchronised with those of the other ensemble members. There is a sharing and agreeing as to the realisation of the whole, the interpretation of that whole and matters such as balance and dynamics are addressed. This third element could be expressed as the externalisation and socialisation of the music.

Exhibitionary Performance The final element is exhibitionary performance. This performance of the music is fundamentally different to all the other performances and playings. Not only is there 'no turning back' once the performance has started but the musical sound, and ensemble members perception of it, is fundamentally altered by the presence of an audience. The interaction between performers and audience gives the music a new intensity and meaning. At the exhibitionary performances attended during this research the young musicians appeared to rise to the occasion and passages that had caused problems in rehearsals suddenly sounded effortless.

Whether some or all these stages in the rehearsal trajectory occur over time or almost instantaneously their position in the rehearsal trajectory is tightly constrained. For example, until ensemble members can individually play the notes of their part, or musical line, in sequence and time they cannot begin the task of synchronisation.

The typologies emerging from the data in this study, those of rehearsal mode and rehearsal trajectory, together proffer a framework through which the process of rehearsal can be conceptualised. Similarities between the two typologies are obvious and to be expected as a rehearsal represents a point on an individual, or more often, several different rehearsal trajectories. A rehearsal may involve working on several different pieces of music each at a different point in its rehearsal trajectory. The decision to use where appropriate, the same or similar language when defining or describing categories in both typologies was taken in order to emphasise the linkage between the two sets of categories. They are different cross-sections of the same whole. A rehearsal is a mechanism through which a rehearsal trajectory is realised. MLP rehearsals have their own structures and conventions and some functions, such as the development of sight-reading skills that are additional to the requirements of a rehearsal trajectory. However, the main purpose of a rehearsal is to progress a piece of music along its rehearsal trajectory.

Segmentation

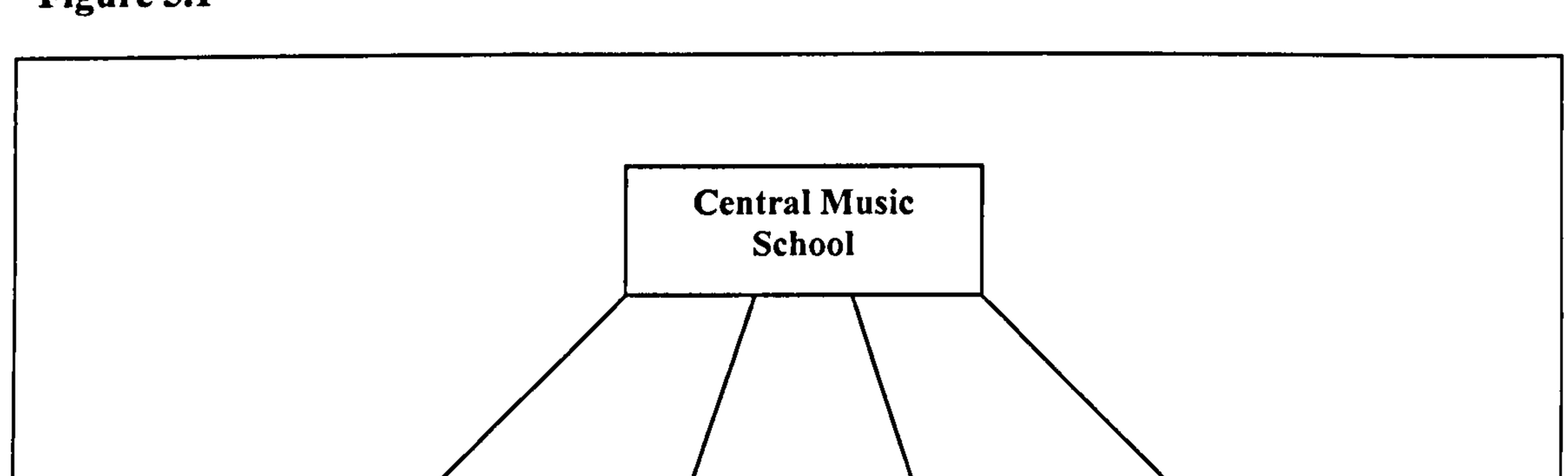
All rehearsals observed in this study incorporated the segmentation of the music as a tool to access and mastery. The music is broken down into manageable passages. These are then rehearsed in detail before moving on to the next segment. Several segments may be rehearsed before being fitted together or a cumulative approach may be taken where each newly rehearsed segment is attached to the previously rehearsed segment before rehearsal commences on the next. The lengths of the segments used in senior rehearsal have a greater range than those used in junior

ensembles. Segments in senior ensembles can be as short as one or two notes or as long as one hundred and twenty bars, and more. During the rehearsal of 'A Borodin Festival' by the Senior Concert Band (Ch 4:92) segment length varied from "single notes" to "expansive phrases".

Learning Pyramids

The emphasis so far has been on ensembles as individual settings and communities. However, these individual ensembles form part of a larger community, a MLP. The MLPs provide different ensemble levels of learning and musical experience through which the young musicians can pass. Figure 5.1 shows the learning pyramid found

Figure 5.1



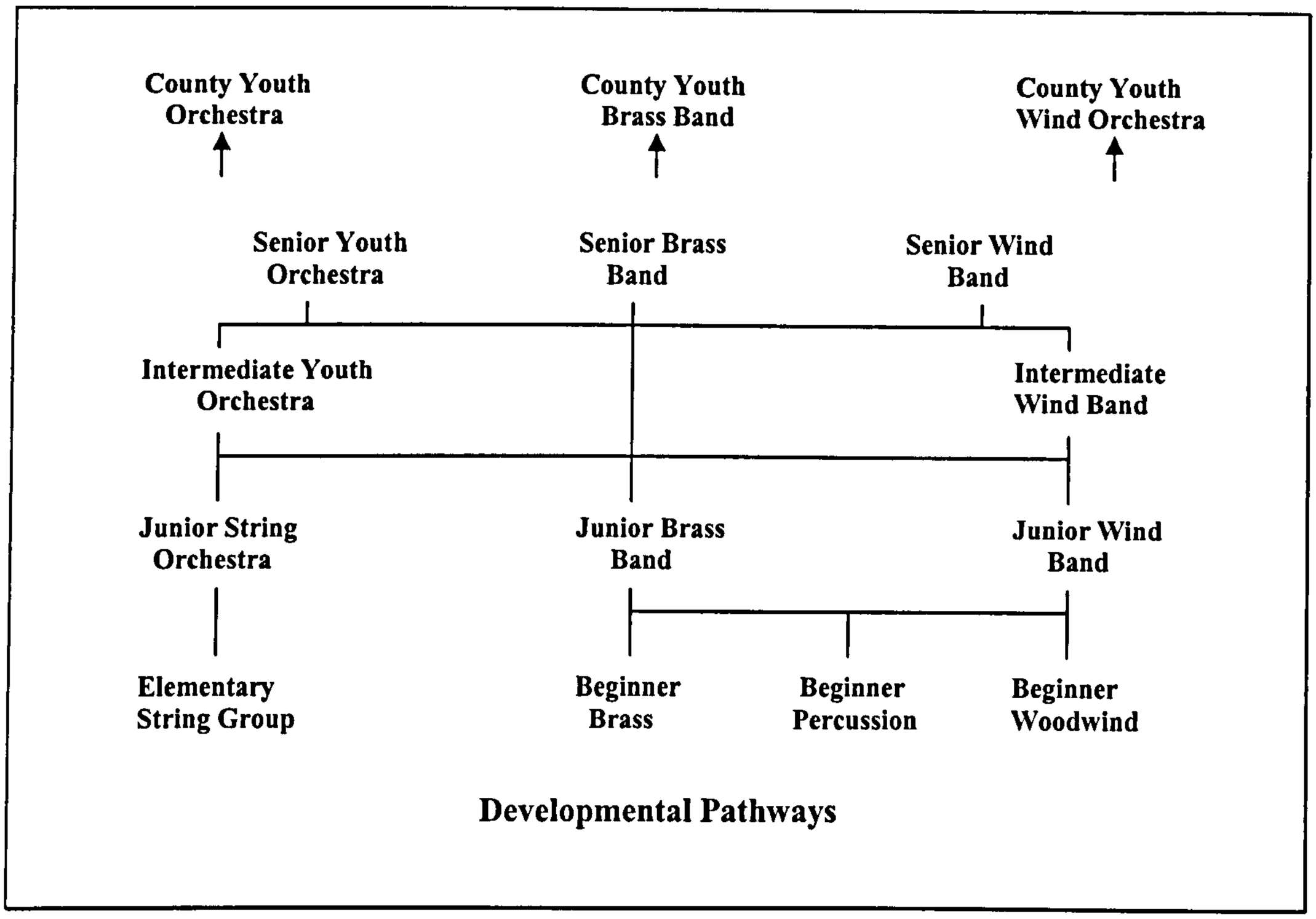
Musical Learning Pyramid Found in Study Music Service

in this study. It reflects very closely the pyramid described by Cleave and Dust (see Ch 1:5-6) and shows how a pupil may progress up the learning pyramid. For example, a young violinist may commence their musical learning and development of ensemble skills with group tuition at their school. As their skills develop they may then join a starter string group at the local music centre. They could then progress through a junior string orchestra into an intermediate orchestra, to a senior orchestra. Then finally, on to central music school, which draws its membership from the young musicians in senior ensembles in music centres across the authority, and a place in the county youth orchestra.

Developmental Pathways

Figure 5.2 (p130) shows the various pathways available to MLP members as they progress through a music centre and on to central music school. These, or similar, pathways are replicated in each music centre, all leading to the pinnacle of the learning pyramid, the central music school. The pathways shown are not those of any particular music centre but a simplified composite drawn from all the music centres involved in this research. It shows the pathways for three ensemble types - orchestra, wind band and brass band. It can be seen that a young percussionist could join the Beginner Percussion Group then transfer to the Junior Brass Band, moving from there to the Intermediate Wind Band, to the Senior Youth Orchestra before transferring to a county youth group.

Figure 5.2



While all music centres appear to offer young musicians the opportunity to change ensemble type, or play in several ensemble types, as they progress through the music centre it would be unusual for a student to follow a pathway as diverse as that of the percussionist outlined above. The data suggests that the majority of pupils remain in the same or similar ensemble type throughout their music centre membership. The following extract is from an interview with 'Denise', principal flautist with the Senior Concert Band. In this extract she describes her instrumental development and ensemble progression in the music centre.

GC Flute's your first study is it?

D. Flute is my first study, well I started with the recorder first obviously, and that was at first school when I was about

nine and then when I went to middle school I got put into a recorder consort which Mrs Smith ran, and everything, and then I got into the flute from that because obviously I had some knowledge of reading music from that. So then I did flute grades two, three, four and five and obviously theory of music as well. I'm doing my grade six at that, yeah, but I decided to not do anymore flute exams after grade five because I didn't think it was going to help with anything because, well I had my GCSEs at the time as well, and obviously my school work was building up then so I decided to stop having lessons then.

GC How long ago was that?

D. That was three years ago now, yeah so I decided to stop having lessons then because of my exams, yeah, that was why. Yeah, so I started playing in Beginner Band when I was nine, I was in year five, Beginner Band, at the back as you are. Yes, progressed to the front of that and then got promoted to Junior Band when I was in year six or something, something like that, six or seven and then, again at the back, didn't know a thing, got moved forward again and, to the front and then obviously to Senior Band and that's because I reached like the top of Senior Band as first flute I decided, that that was another reason why I decided to stop taking lessons because I thought that I'd got as far as I could here and obviously I'm hoping to go to university later this year so I thought that I'm going to be leaving here, relatively soon anyway, so I thought that I didn't really need to do anymore. I didn't take GCSE music either because I thought, because obviously grade five is roughly equivalent to a GCSE anyway, so I thought since I'd got that like three years previously, I thought it would probably just, it'd just be like what I consider the boring parts of learning about the composers and when they were born and things and not the actual playing of it and things.

The experience of 'Denise' was reflected in other young musician's accounts of their personal progression through music centre ensembles. The occurrence of moves to dissimilar ensemble type was unusual and, in this study, multiple changes of ensemble type did not occur. This may be explained by the difference of style and

repertoire associated with each ensemble type. Indeed in some cases the notation reading skills required differ between ensemble types. For example, all instruments in a brass band read Bb transposed, treble clef notation regardless of instrument pitch. Whereas in an orchestra or wind band the lower pitched brass instruments read from the tenor or bass clef, at pitch. It may be that some young musicians are unwilling to learn new reading skills and therefore remain in the same ensemble type throughout their music centre careers.

Instrument type is also an obvious constraint on the pathways available. In Figure 5.2 (p 130) a 'cellist would have no choice but to follow the pathway from Elementary String Group through Junior String Orchestra and Intermediate Orchestra to Senior Youth Orchestra. Also, in the music centres that formed this investigation, there were problems, created by the timetabling of ensemble rehearsals, for any pupil wishing to change ensemble type and particularly pupils wishing to engage in more than one ensemble type. For example, in one music centre the Senior Wind Band and Senior Youth Orchestra rehearsed at the same time in different buildings. Therefore, it would not be possible for a woodwind or brass player to play in both an orchestra and a band at a senior level.

Ensemble Transfer

Pupils move up through the MLP from one level to the next. Each new ensemble level is musically more sophisticated and requires a higher technical standard of instrumental playing. The point in time, and in the individual's development, at

which pupils are elevated to the next ensemble level is influenced by several complex factors. Ensembles within MLPs exist to progress young musicians by enabling them to learn and develop their ensemble playing skills. Therefore, it could easily be assumed that the point of transfer to the next ensemble level is when each individual is ready to make that move. However, several other factors influence that decision. These take into account the needs of the MLP, the needs of individual ensembles and the needs of the individual musicians.

Factors that may influence the timing of a pupil's transfer from one ensemble level to the next include the instrumental balance and musical viability of the ensemble of which the individual is currently a member and of the ensemble to which they would transfer. For example, transferring two flautists from an intermediate wind band, in which they are the only flute players, to a senior wind band that already has eight flautists would lead to further imbalance in the instrumentation of the senior ensemble and restrict opportunities for the flautists in it. It would also leave the junior ensemble with no flute section at all and therefore possibly as musically unviable. Age can also be a factor. A music ensemble is a social as well as a musical community and transferring a child into an ensemble that has an age spread completely different to their own age group may be considered undesirable. For example, placing a talented eight year old violinist in a string orchestra comprising mainly of fifteen and sixteen year olds could create problems of socialisation and even of communication for the young violinist and the ensemble.

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All of these factors weigh in the decision about when to transfer a young musician to the next ensemble level. When the individual does transfer they may have been ready to move for some months, for some it will be the ideal moment to transfer, while for others it may be a little earlier than is ideal. However, all pupils seemed to relish the opportunity of transferring to a more senior ensemble and the new challenges and learning that it offers.

Graded Repertoire and Materials

There is a large published resource of graded ensemble music that supports and facilitates the pyramid of ensembles. Composers and arrangers write graded ensemble music with particular levels of ensemble in mind. They restrict the range and technical demands of the music to reflect the abilities of pupils at different stages of their development as musicians. On numerous occasions during this study conductors and ensemble leaders were observed altering or simplifying parts to published scores to bring them within the technical ability constraints of less experienced players while still affording the more advanced players the opportunity of being challenged by the published part. In addition to this published resource the conductors and ensemble leaders in this study composed and arranged specifically for their own ensembles, thereby ensuring that the technical requirements of the music was tailored to the individual abilities and needs of each young musician. The use of differentiated parts was evident at all levels of the MLPs in this study.

Summary

This chapter has examined the setting of progressive ensemble rehearsals. It has explored the meaning of ensemble membership and how individual members experience it. It has examined the conventions and language of ensemble rehearsal and has described the career path which pupils take through music centres. It has also explored the process of rehearsal and suggested two typologies that together provide a framework through which rehearsal can be conceptualised and examined. Given the under researched nature of ensemble learning it has been necessary to explore the setting and nature of ensemble membership and the process of rehearsal as a precursor to the exploration of learning within them. The next chapter will examine the skills required in ensemble playing and how those skilled are acquired.

Chapter Six

SKILLS, PARTICIPATION AND COLLABORATIVE REALIZATION

Chapter five described the settings and communities that are ensembles and the process of ensemble rehearsal. The aim of this chapter is to describe the skills of ensemble and how they differ from the technical skills required to play a musical instrument. This is followed by an exploration of learning and skill acquisition through participation, the varying levels of participation in ensembles and the development of musical negotiation skills. There is also an investigation of distributed cognition within ensembles.

What are ensemble skills?

The aim of an ensemble member is to realize complex aural structures or compositions, by internalising an element or thread of that structure. This thread is accessed through musical notation or by committing a musical line to memory. Once the thread has been internalised it must then be realized through the voice or a musical instrument and placed or interlocked with the other threads, these having been internalised and realized by other ensemble members, in such a way as to

realize the whole. It is this latter stage of interlocking the parts together to create an aural composition that is greater than the sum of its parts that is the essential uniqueness of ensemble. The relationship between technical and ensemble skills is that of complementary and inter-reliance and it is often difficult to separate the two. The musician requires sufficient mastery of technical skills in order to exert sufficient control over their instrument to enable them to synchronise and share a collaborative realization of the composer's or originator's intentions. However, separate technical and ensemble skills can be identified.

Participation in an ensemble is not reliant on the individual members being of the same musical experience or understanding. All players in an MLP ensemble may not have achieved the same musical standard. Furthermore, sections of an ensemble have differing skills dependent on the nature of their instrument and its historical use within the ensemble. For example, the technical and musical demands of playing in the violin section of an orchestra are very different to the demands of playing in the trumpet section of the orchestra. However, both sections are playing in the same ensemble and contributing to an overall standard of synchrony and performance. All the various musical and technical skills required by an ensemble do not rest with one individual or with all the ensemble members, but rather each brings some of the skills and knowledge required to create the musical whole. Though each musician brings their own instrument specific musical and technical skills to the ensemble there are also areas of common musical skills that enable them to perform as an ensemble and integrate their various musical inputs to the musical whole. Ensemble

specific skills can be viewed as forming some of the overlapping skills and knowledge that facilitates distributed cognition within the ensemble. To see why this is we need to consider the distribution of knowledge that enables the many and various skills required in an ensemble to perform together.

Distributed Knowledge

The knowledge required to complete a task may be distributed among a group of people. Within a musical ensemble are different and varied skills, for example, the skills required to play the clarinet differ considerably with those required to play the violin, or indeed the trombone. It is frequently assumed that the total knowledge required in cooperative tasks is apportioned among individuals in a 'mutually exclusive manner such that the sum of the individual's knowledge is equal to the total required and that there is little or no overlap' (Hutchinson 1996:48). However, this pattern of knowledge distribution is rare. At the other end of the knowledge distribution spectrum is a system in which each individual has the skills to complete any part of the task. This pattern is also rare as it is very expensive.

Hutchinson (1996:48-50) describes a more common pattern of distributed knowledge in which 'as people become more skilled they move on to other roles in the task performance group making way for less skilled people behind them' (ibid:49). This system of distributed knowledge means that as people move through the system acquiring increasing expertise a pattern of overlapping expertise is created. It is the

contention here that the model of distributed knowledge seen in ensembles reflects a different pattern. The instrument specific knowledge and skills held by individual ensemble members are discrete and separate, however, in order to perform together the musicians require some shared knowledge. It is necessary for all the ensemble members to understand the musical rules of ensemble and to share knowledge of ensemble specific skills. Indeed it is this shared knowledge that facilitates the functioning of the distributed knowledge system on which ensembles are predicated. Furthermore, it is postulated here, that it is within this shared knowledge that ensemble specific skills are to be found.

Ensemble Skills

Ensemble skills are the skills that enable musicians to participate in ensemble music making. These skills may not be exclusive to ensembles but they are the skills that enable musicians to combine their varied and various specialist skills with the specialist skills of other musicians. Analysis of the data in this study identified nine categories of skill that are used by musicians in ensemble playing. Each of these nine categories may not apply to all instrumental disciplines but all were identified in ensemble playing. These skills are:

1. The understanding and interpreting of aural and visual cues.
2. The understanding and interpreting of conducting and directional gestures.
3. The awareness of the musical balance between individuals, groups of instruments and musical lines.
4. The ability to maintain externally imposed tempi.

5. The ability to maintain externally imposed tuning.

6. The skill of negotiated and shared intonation.

7. Understanding the specialist language of ensemble rehearsal and performance.

8. The adoption of rehearsal and performance conventions and behavioural norms.

9. The ability to engage in the negotiation of a collaborative realization.

This research suggests that some or all of these nine skills are requirements of ensemble playing, although not all nine ensemble skills are applicable to all instrumental disciplines. However, these represent a range of skills that can be identified as ensemble skills.

The first ensemble skill, understanding and interpreting aural and visual cues, facilitates the ensemble musician in contributing their musical line or sound to the whole. Visual cues that facilitate synchrony may come from many different sources, like the nod of a head or the drop of a shoulder, at a very simple level seeing other members of the same section preparing to play, after a period of rest, will give the inexperienced player the confidence that they have counted the bars rest accurately. Aural cues may come in the form of the movement of another musical line or the entry of a particular instrument section. Some cues are very subtle and while practising musicians are aware of them they are very difficult to observe. For example, being aware both aurally and through peripheral vision, of the intake of

breath of fellow section members enables wind players to synchronise note production.

The second ensemble skill, that of understanding and interpreting the gestures of conductors and musical directors, is about understanding formalised visual cues and also the interaction between conductor and ensemble members. For example, in *Vignette II* (Ch 4:94) Mr Lovell was unable to "catch the eye" of Ralph, the alto saxophone player in the Senior Concert Band. This failure of contact led to a complete loss of synchrony. However, the gestures, body language and facial expressions of a conductor or musical director do more than give cues to synchrony, they also communicate mood, style, dynamics and expression. Both of these first two ensemble skills require the individual to be aware of, and interact with, other members of the ensemble in order to develop methods of communication and interaction within the ensemble.

The third ensemble skill, the awareness of the musical balance between individuals, groups of instruments and musical lines, is reliant on extended aural awareness and negotiation. It requires the young musician to be aurally aware of not only their own musical contribution but also that of their instrumental section and the ensemble as a whole. It is the ability to produce a musical line at a volume level that allows the contribution to be heard, but also at a level that is relative to the musical prominence of the line in the composition, and relative to the strength of other lines within the ensemble. This balance is reached by negotiation and different ensembles reach

differing negotiated solutions, giving each ensemble a unique sound that is the product of all ensemble members. For example, after rehearsing a syncopated accompaniment in *Vignette II* (Ch 4:88-89) Mr Lovell turned to the flute section of the Senior Concert Band. "I hope you were listening to that" he said "because your melody sits on top of it". This statement was not only intended for the flute section, Mr Lovell is pointing out to the whole ensemble the relative prominence that each musical line should have. The musicians then negotiate the exact volume level of each line while rehearsing, the level of each being informed by the level of the others.

The fourth and fifth ensemble skills deal with externally imposed tempi and tuning. The young musicians must learn to maintain a tempo that they may not have chosen for themselves. Not only is the tempo externally imposed, it is less forgiving than a tempo set by the individual for the individual. It does not allow for slight slowing during technically demanding passages or for slight increases in speed during long sustained passages. Likewise externally imposed tuning presents problems for the individual. After initially tuning at the commencement of a rehearsal or exhibitionary performance the young musician must constantly monitor the tuning levels. Families of instruments react to environmental changes in different ways. For example, a change of temperature may cause the instruments in some families to go flat while other instrumental groups react by becoming sharp. The musician needs to adjust as necessary to the changing tuning level. In *Vignette II* (Ch 4:81) Denise asks Mr Lovell to tune the flute section prior to commencing rehearsal of 'Phantom of the Opera'. While tuning each flute he explains that tuning is something

that will change constantly during the course of a rehearsal or performance and that each ensemble member should always be listening and making necessary adjustments. Even after re-tuning there were obvious tuning difficulties among members of the flute section during their exposed opening passage. The waywardness of their tuning was attributed to tightening embouchures caused by anxiety. The tuning was only improved when Mr Lovell distracted attention from the tuning problem; this caused the flautists to relax their embouchures thereby alleviating some of the poor tuning.

The sixth skill, negotiated and shared intonation, is the ability to place the individual's musical line into the aural weave of the composition and preserve the musical intervals between individual lines and sounds. It could be described as musical triangulation. The fine-tuning of a pitch or note is dictated by the pitches around it in the weave. Therefore, the musician has to mediate and negotiate with the other musical lines in the weave to ensure accurate intonation. In *Vignette II* the last four bars of 'A Borodine Festival' (Ch 4:92) consisted of a unison rhythm, in octaves, played by all members of the band. This passage highlighted issues of intonation. Each member of the ensemble had to ensure similar intervals between individual notes in order to preserve the quality of intonation. This particularly difficult ensemble passage was rehearsed several times by Mr Lovell before all ensemble members agreed the intonation.

The seventh and eighth skills of ensemble deal with language, conventions and behaviour. All communities have their own specialist language, whether it's simply by reference to things unique to that community or the use of professional or technical specialist language that is the preserve of that community. Musical communities use both specialist and convenience language. Ensemble members need to acquire a knowledge of musical terms, many of which originate from the Italian, German and French languages. They need to acquire a knowledge of the technical language associated with the musical instruments and other artefacts used in ensembles. They also require knowledge of abbreviations, verbal 'short-hand' and non-standard words and phrases used in ensembles. In order to acquire full membership of an ensemble the young musician needs to adopt the conventions and behavioural norms of the community. Many of these are common across all music making communities however there are local variations that need to be observed by any newcomer to an ensemble. For example, Mr Singh (see Ch 5:97-98) insisted that Asian music should be passed and retained aurally and therefore should be played without reference to notation. However, this is not the convention in Junior String Orchestra and Senior Concert Band. Indeed, the accurate reading of notation is an aspiration in both these latter ensembles.

The final ensemble skill is the ability to engage in the negotiation of a collaborative realization. It is the skill that turns rehearsal into performance and individual effort into a whole that is greater than the sum of its parts. Each musician in an ensemble will realize the same composition in a different way. Indeed, the individual's view of

the end product, the performance, may even be partial. Each individual's realizations take place in a context that combines a vast array of factors. These include the organisation of the ensemble, the individual's level of training in both technical skills and musicianship, their immediate and long term personal history, past experience with similar compositions, interaction with other ensemble members, the realizations of others, the way the music sounds and the way the notation looks. In order to turn rehearsal into performance the various realizations and partial realizations of individual ensemble members need to be negotiated into a single shared realization of the composer's, or originator's, intentions. Negotiation within an ensemble is carried out through a process of submission, assertion, compromise and leadership. The resultant collaborative realization does not require every member to submit to the same mental aural imagery of the composer's or originator's intentions. It is an agreed settlement of conflicting realizations that are existent within that ensemble. It is performance that belongs to that ensemble.

As was suggested earlier not all the above skills are common to all instrumental disciplines. For example skills 5 and 6 – the ability to maintain externally imposed tuning and the skill of negotiated and shared intonation – are not applicable to pitched percussion instruments such as glockenspiels and xylophones, un-tuned or indefinite pitch percussion instruments such as drums and gongs or keyboard instruments such as pianos and harpsichords. However, the nine categories of skill identified above can all be found in ensemble playing.

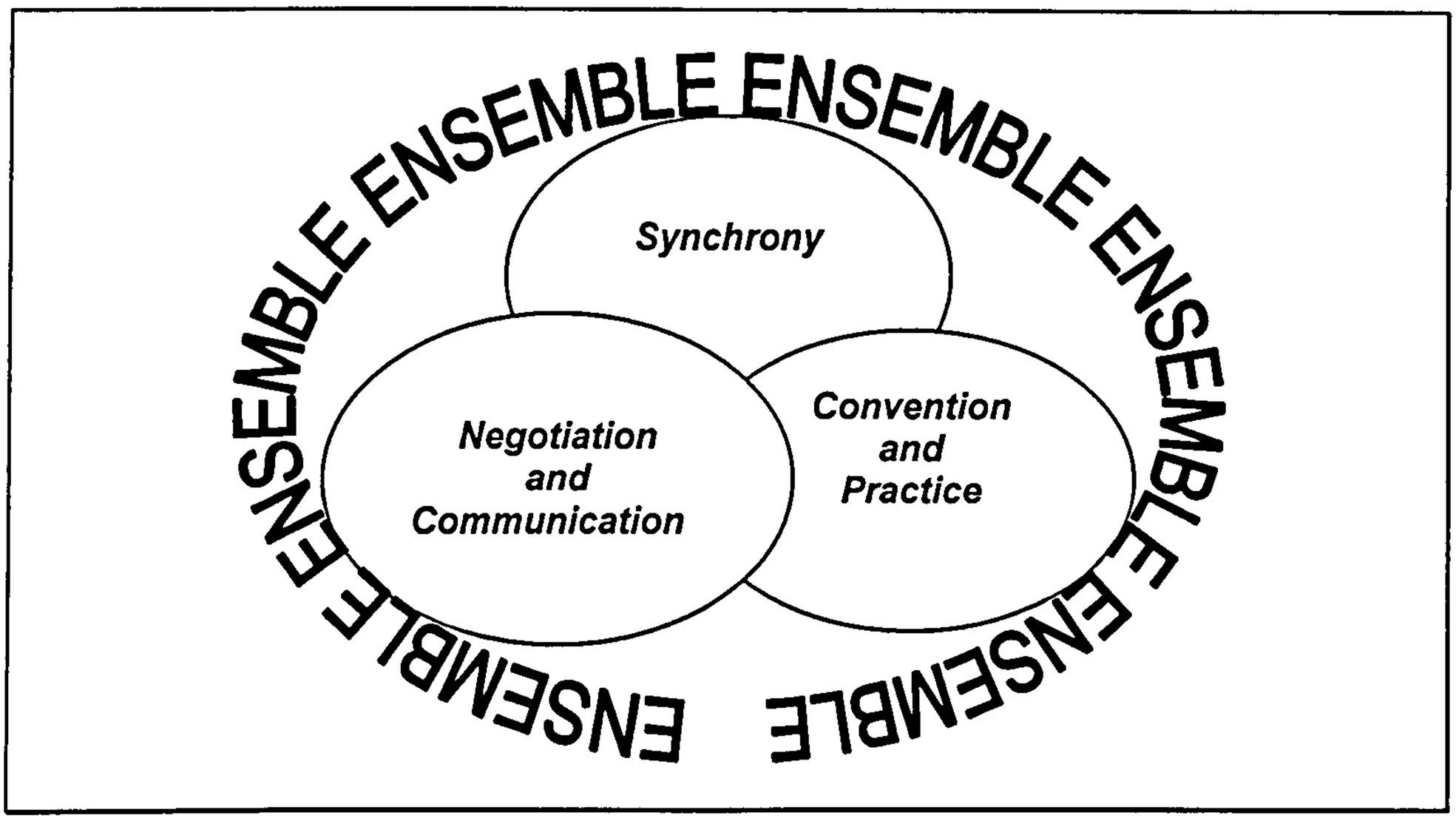
These nine categories represent the skills that enable ensemble. However, ensemble is not exclusive to the activities of progressive bands and orchestras. Many instrumental teachers accompany their students on the piano or play along with them during their instrumental lesson. Many pupils who learn to play an instrument in the state maintained sector have a shared instrumental lesson and will from the very beginning of their instrumental career be playing with other instrumentalists. The skills identified above will be found and developed in any setting in which musicians play together. However, it is conceivable that the development of these skills is heightened in the larger and more formal ensemble setting where the young musician is endeavouring to musically negotiate with a large number of other participating musicians.

Ensemble Specific Activity

While detailed analysis of the data revealed nine ensemble specific skills, higher level analysis suggests that each of these skills contribute to one or more of three ensemble specific activity categories (see Figure 6.1, p148). These three categories represent the shared knowledge that holds together the various elements of distributed cognition required to create ensemble performance. These three ensemble specific activity categories are:

1. Synchrony
2. Convention and practice
3. Communication and negotiation

Figure 6.1



Ensemble Specific Activity

Synchrony Synchrony is the skill of synchronising an individual line or musical thread with that of others in order to create a greater whole. It is the skill of placing notes in the appropriate place respective to other musical lines. Synchrony also includes the balancing of dynamics with other individuals and musical lines and tuning to the pitch of the ensemble, as well as negotiating and agreeing the intonation between ensemble members. The young musician must learn to synchronise with others, to play as part of a team. At its simplest level it could involve synchronising the playing of a unison rhythmic pattern by the whole ensemble. At a more complex level it may involve maintaining a musical line that is seemingly contrary and completely independent of all others within the ensemble, for example, the playing of triplets 'against' duplets. However contrary or independent a musical line may appear it must be played relative to the other

musical lines in the composition. The ensemble player needs to listen to their own musical line, to its synchrony with others playing the same line and synchrony with their own instrumental section, or musical or instrumental family, and the ensemble as a whole. The young musician needs to develop an extended aural awareness, which facilitates listening and synchronising on different levels at the same time. At its most complex it's about listening to, and fitting into, a weave of rhythmic and melodic patterns to synchronise and choreograph the individual part, section or musical line with others to produce a whole. In some ways it could be likened to a marching display or a synchronised swimming routine. At times the individual moves, both rhythmically and melodically, exactly with other ensemble members, at other times the individual must move seemingly against or in contrary motion to other members of the ensemble but at all times the whole must synchronise together. This extended aural awareness is also required to enable musical balance and negotiated dynamic strengths. What follows is an extract from an observation of the Senior Concert Band:

> Mr Lovell asks the whole ensemble to start playing from bar 84 but he explains that he will be taking it under tempo so that they can hear how it all fits together. They play from bar 84 for about 24 bars. Mr Lovell asks them to do it once more at the same slower tempo but this time observing the dynamic markings. At the end of the passage he allows them to continue playing on into the next section. After about 8 bars of the new section, he stops them and says to the clarinets that 'something odd' is going on in the accompaniment line they are playing at this point. The clarinets play the accompanying line on their own. Mr Lovell stops them after about 4 bars and tells them that they are playing the correct notes but that they are not listening to each other and moving together. They play it again this time with greater synchrony. He tells them that what they (the clarinets) are playing is an accompaniment to a cornet solo and that as well as listening to each other they must listen to the solo line and be

> sympathetic to the soloist, allowing for rubato and nuance while still remaining synchronised as a section. The whole band commences playing from bar 116 with Mr Lovell playing the cornet solo line on his trumpet.
>
> (Senior Concert Band, Observation 4, 25 April 2001)

The clarinet players "not listening to each other" and therefore not "moving together" caused the problem in the clarinet accompanying line. When, after a period of rehearsal, they achieve a level of synchrony Mr Lovell reminds them that they are playing an accompaniment to a cornet solo and that "as well as listening to each other they must listen to the solo line and be sympathetic to the soloist". Indeed, their extended aural awareness is tested further as Mr Lovell explains that they must be prepared for "rubato and nuance" in the solo line "while remaining synchronised as a section".

Communication and Negotiation The skills of communication and negotiation are both musical and non-musical. Communications between ensemble members may be social interactions or music interactions, or a mixture of both. In *Vignette II* (Ch 4:90) Mr Lovell mixes musical and non-musical communication. He sings a semi-quaver passage to demonstrate how he wishes it to be articulated. He pauses briefly on one note "put a tongue on that one" he says, before he completes the singing of the phrase. He uses his voice to model the phrase adding verbal explanation to highlight a particular feature of the phrase. Mr Lovell's communication was overt and obvious however, communication between ensemble members may be subtle and discrete. Some communications will involve almost

imperceptible movements or very brief eye contact. It is these many forms of communication that enable ensemble members to share their realizations of the composer's, or originator's musical intentions. These communications are used to negotiate. Negotiation involves discovering how to engage with other ensemble members, what works and what does not, and establishing the roles of others. It is a process of submission, assertion, compromise and leadership. It is the process by which the ensemble members try to understand musical intentions and reconcile conflicting interpretations of the music.

Convention and Practise Conventions and practise are the rituals, practises and conventions that provide the structure of a musical rehearsal. These are the use of language, the behaviours and the situational understanding that is peculiar to a musical rehearsal. Conventions offer a shared starting point and a commonly shared direction. They provide channels for communication and allow assumptions to be made about the intentions and behaviours of others. Many conventions observed in ensemble rehearsals reflect a body of shared and received knowledge that forms part of the history of an ensemble type. These conventions are successful solutions to problems that have been evolved by previous ensemble members. Ensemble members do not have to invent a process to overcome each problem, as a pathway has already been identified. For example, the seating arrangements of specific ensemble types are often largely standardised. However, the reasons for the seating plan are not explained to newcomers who are simply shown where to sit. They learn that by convention, the players of certain instruments sit in certain places relative to

other ensemble members. This convention is then reinforced by repetition and by example of other similar ensembles following a similar convention.

Convention and practice is also reflected in the use of language, which can be both situational and technical. Situational language may include verbal 'short hand' and the use of non-standard musical words and phrases, these are used to facilitate and speed communications within the ensemble as well as to emphasise inclusion and membership. Situational language provides cohesion and a shared vocabulary for ensemble members. Technical language may refer to musical instruments and their component parts or to the playing of the instruments, either technically or musically. It may refer to the music itself describing mood, tempo and articulation. It may also refer to the ensemble and the process of rehearsal. Conventions and practices can also be used as a 'rite of passage'. The individual musician becomes a full member of the ensemble when they behave according to the conventions and practices of the ensemble.

The three-category typology outlined above is not simply a clustering of the previously identified nine ensemble skills. Indeed, some individual ensemble skills can be placed into more than one activity category. Rather, these are the activities enabled by the nine ensemble skills. These three activity categories emerged from the data as the activities specific to ensemble that form the shared knowledge that is required to connect the various individually held knowledge found in the distributed cognition required to create ensemble performance. A consideration of this

framework highlights the interactional nature of ensemble specific activities. These three ensemble activity categories reflect skills of musical and social interaction and participation. They identify shared practice and realization arrived at through interaction and negotiation. These categories suggest that ensemble specific activities are 'socio-musical', that is, they are musical and non-musical skills that are used to facilitate interaction between ensemble members in order to produce a collaborative realization.

Imported Skills

Analysis of the data also identified secondary ensemble skills. These are skills that are not exclusively or largely skills of ensemble but rather, skills and knowledge that are imported into the ensemble with the individual. These skills are often requisite to gaining access to the ensemble and are vital to the process of ensemble. These skills are the areas of discrete knowledge required of a distributed cognition (see Figure 6.2, p154). These are skills that are learnt as part of instrumental technique, or musical theory, or even other social settings and then adapted and expanded for use within the ensemble.

These imported skills include:

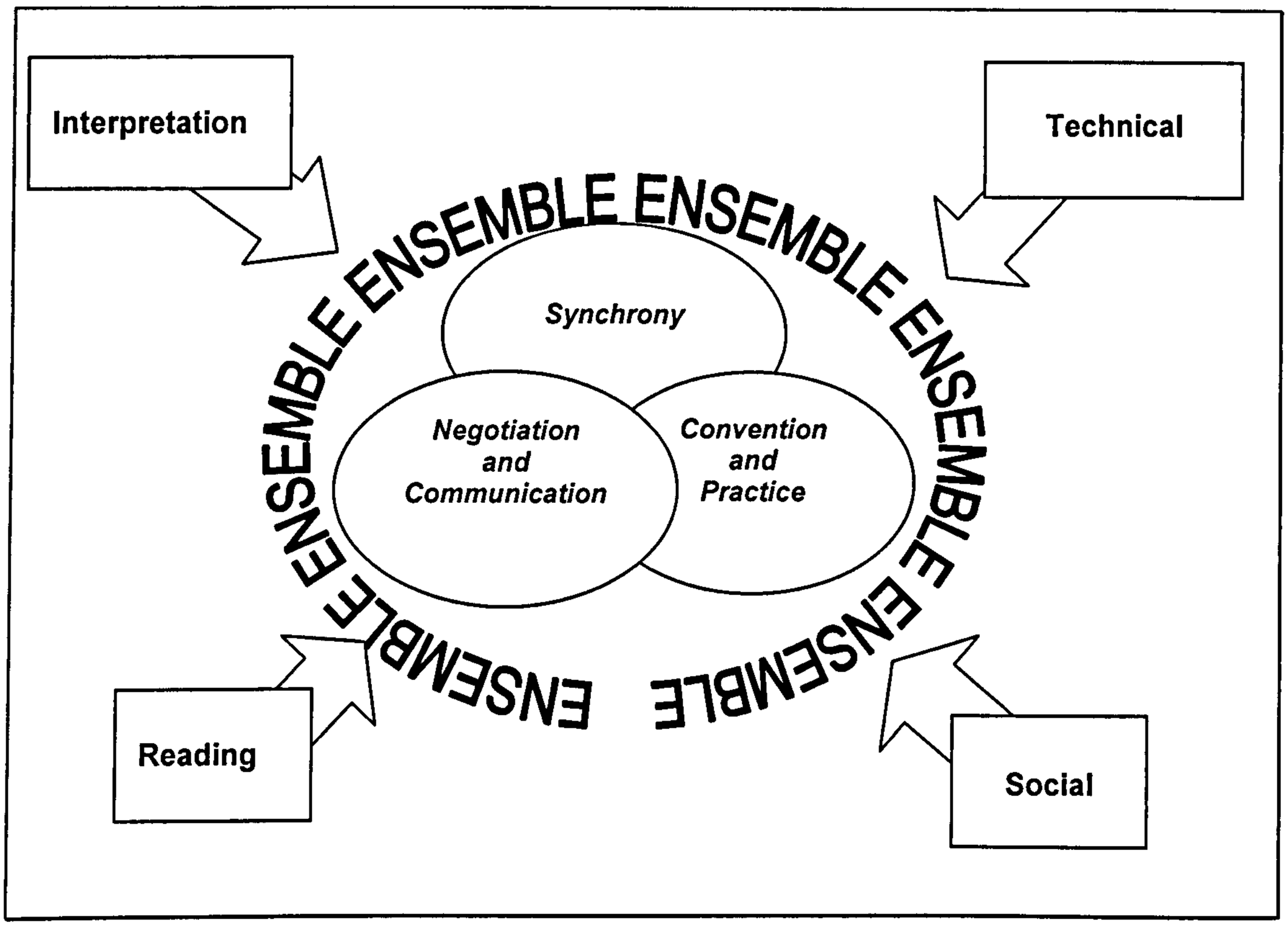
1 Interpretation

2 Technical

3 Reading

4 Social

Figure 6.2



Imported Skills

Interpretation Interpretation and realization of the composer or originator's intentions are essential elements of all music teaching and learning. Therefore, a newcomer to an ensemble will be used to interpreting and realizing the musical concepts and ideas of others. It is these skills that form the platform for the negotiated and shared realization that is the product of ensemble. Also included in this category are stylistic conventions. These can be instrument or ensemble specific style, for example, how jazz ensembles 'swing' a dotted rhythm or historical style for example the 'double-dotting' of some baroque music. Though this knowledge is

imported into the ensemble, like all imported skills it will be further developed and expanded within the ensemble.

Technical Technical skills are required to sing or play a musical instrument. It is the contention here that ensemble skills are separate from technical skills however, the mastery of technical skills to the required level enable access to the ensemble. If the technical demands of the music played by the ensemble are beyond the instrumental technique of the young musician then they will not be able to participate in the ensemble. Therefore, instrumental technique is a skill that is acquired elsewhere and brought to the ensemble. Its purpose in the ensemble is however different. Instrumental technique is not used in ensemble to control and shape a single musical sound, it is used to control a component of an ensemble sound.

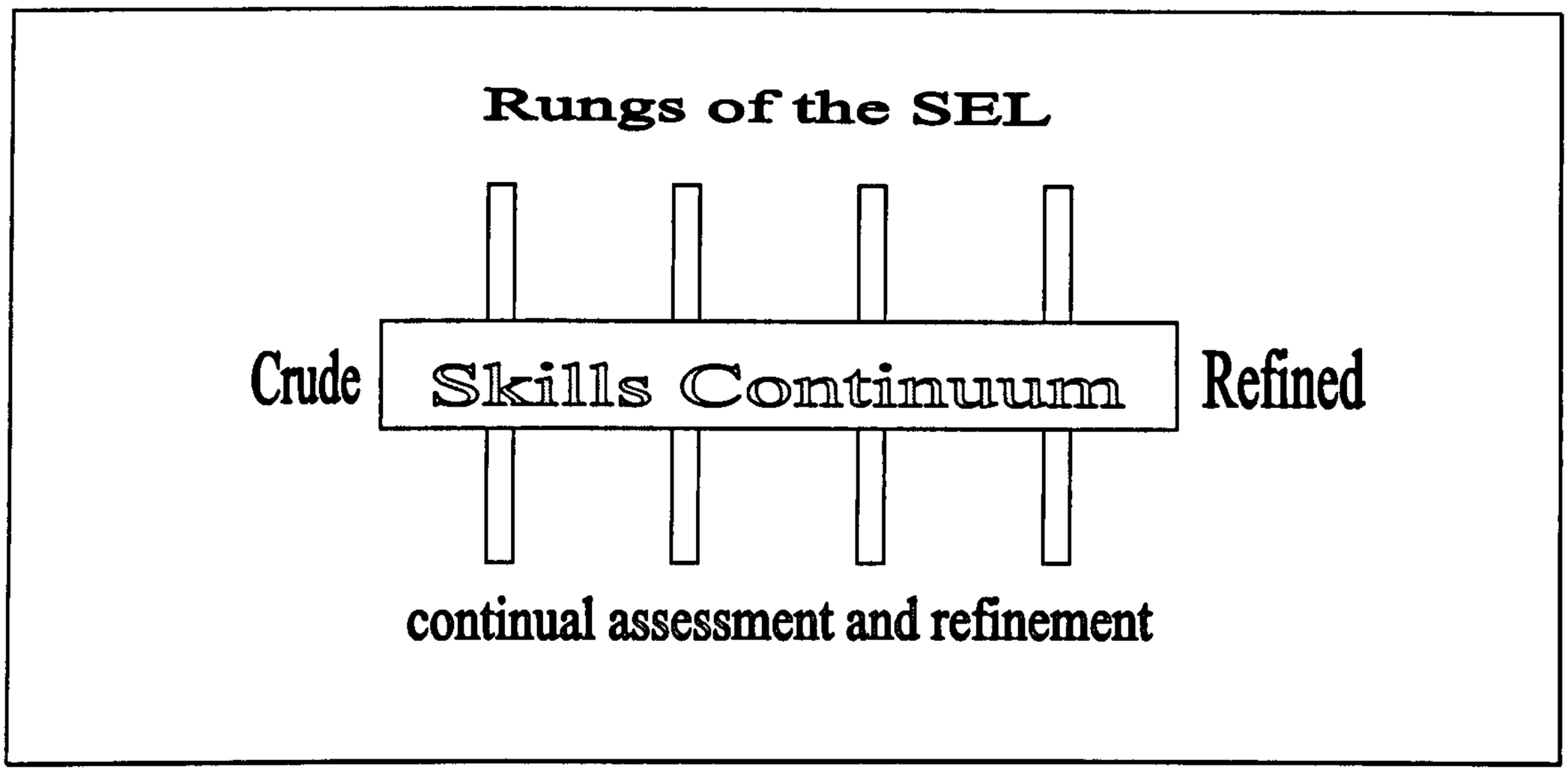
Reading Reading skills can be defined as the ability to take and internalise a musical line in readiness for externalisation through a voice or musical instrument. It may be done through some form of notation or by committing a line to memory. When these skills are used in ensemble they have to be used within tight parameters of tempo and dynamic. There is also signage and notational devices that, while not exclusively used in ensemble notation are, none-the-less, more likely to be encountered by the young musician for the first time in an ensemble setting, for example, coda signs and da capo.

Social Finally there are skills of social interaction that are brought to an ensemble. An ensemble is a social setting. It is made up of people. Therefore, the young musicians bring with them their ability to communicate and interact with other people. These skills build relationships within the ensemble as well as providing the starting point for the development of the musical communication and negotiation skills that are required to produce performance.

A Continuum of Refinement

The data collected in this study indicates that the nine ensemble specific skills and the three ensemble activity categories identified earlier are to be found at all levels of an MLP. The data suggests that the skills used in all ensembles, whatever the standard, are the same. This implies that learning ensemble skills is not a process of knowledge accumulation, but rather, that the skills of ensemble are constant and applicable to all ensemble playing. Therefore, learning in an MLP could be expressed as a continuum of skill refinement rather than one of skill accumulation. In figure 6.3 (p 157) the skills required in ensemble playing are represented by the continuum. The pupils begin their organised ensemble activity in the learning pyramid in junior ensembles, shown on the left of the continuum with crude and unsophisticated skill levels. Their skills develop, by a process of constant refinement to the sophisticated skill levels observed in senior ensembles, shown on the right of the continuum.

Figure 6.3



Continuum of Skill Refinement

The skills required of players in a junior ensemble are precisely the same as those required in a senior ensemble. No matter how advanced the ensemble is the musician is still dealing with and perfecting the same skills as they were in their first ensemble. What changes, as the pupils' progress through the MLP, is the level of sophistication required of each skill. For example, intonation is addressed in both the Junior String Orchestra and the Senior Band. In *Vignette I* Mrs Barlow stopped the rehearsal of 'Tunes from Shakespeare's England' by the Junior String Orchestra and addressed intonation with the violin section (Ch 4:83-84). Each member of the violin section then played the passage in question independently, checking the intervals between notes on the same string carefully, before they rehearsed the passage together. In *Vignette II* the Senior Concert Band rehearse the last four bars of 'A Borodine Festive' (Ch 4:92). It consists of a unison rhythm, in octaves, played by all members of the band. This particularly difficult ensemble passage had to be rehearsed several times by Mr Lovell before the ensemble members were able to

agree the intonation. However, what was different in both of these examples was the level of accuracy expected and achieved.

Similarly, it is as important for players in the Junior String Orchestra to synchronise their playing as it is for players in the Senior Band. In *Vignette I*, while rehearsing 'The Tunes from Shakespeare's England' (Ch 4:84) with the Junior String Orchestra, Mrs Barlow has to address the most fundamental level of synchronisation when the second violin players finish playing variation one two bars before the first violin players. She asks them to play their line on their own in order to ensure that they are playing it correctly, before she rehearses the variation again with the whole orchestra. The Senior Concert Band experienced a similar problem when rehearsing 'Phantom of the Opera' in *Vignette I* (Ch 4:94). Ralph, the alto saxophone player, fails to slow with everyone else towards the end of the introductory section of the piece. This came about because he was unable to see Mr Lovell due to the low height of his music stand and a baseball cap worn low over his eyes. Mr Lovell stopped the band and asked Ralph to raise his music stand and tip his cap back a little. On the next playing Mr Lovell made "a point of catching Ralph's eye" as he slowed the tempo and, as a result, Ralph slowed with the rest of the ensemble. Though the matter being addressed in both rehearsals was that of synchrony the level of synchronisation achieved and the intricacy of the synchronisation required by the score was considerably greater in the senior ensemble.

Developing Ensemble Skills

The data suggests that the catalyst for ensemble skill refinement may be found in 'extended aural awareness'. It can be construed that an incremental refinement of a particular ensemble skill is preceded by a similar incremental refinement of a young musician's ability to hear how a skill could be further refined. What follows is an extract from an observation of the Senior Concert Band:

80	The band commences playing from bar 131.
81	The flute section is not quite with the rest of the ensemble.
82	Mr Lovell stops them after about 16 bars.
83	Mr Lovell (to flutes) *'flutes!'*
84	Denise (to Mr Lovell) *'we couldn't see you'*.
85	Mr Lovell (to Denise) *'well make sure you can* (to all) *131'*.
86	The band commences playing the passage again. This time the flutes are synchronised with the remainder of the band.

In this extract the flute section's synchrony with the rest of the band is poor (line 81). Mr Lovell's irritated response (line 83) assumes that they are capable of hearing this lack of ensemble. Indeed, Denise's response suggests that she is aware of the discrepancy in synchrony as she offers an excuse for it (line 84) which does not placate Mr Lovell. When the Band repeat the same passage the synchrony is music improved (line 86). The flute section's aural awareness has extended to the point that

they are able to hear quite small discrepancies in synchrony and are therefore able to adjust their contribution to the musical whole accordingly.

The assumptions made about the extent of aural awareness among ensemble members in the Senior Concert Band can be compared with that assumed of members of the Junior String Orchestra. What follows is an excerpt from an observation of the Junior String Orchestra. This observation focused on one particular player who has been given the pseudonym of Becky. Becky is a violinist and was new to the ensemble at the time of this observation having only joined early in the term. Previously she had been a member of the Beginner String Group for two years.

12 Becky is very intent and concentrates hard on playing correctly, but she is rarely in close synchrony with the others. After a fermata Becky is caught-out as the ensemble moves on, but she catches up after just a few quavers.

13 The ensemble plays through to the end of the piece. Mrs Barlow (to all) *"right, good. Suzanna"*. [The ensemble members find the sheet music for 'Suzanna' and settle ready to play]. *"Right, while I remember there's no rehearsal for the next two weeks as the school is closed. Right, let's try it again, it's very good but sometimes we're not moving together, we must listen. Right, 4 bars from the piano, here we go "* [the ensemble commences playing after the keyboard introduction].

14 Becky plays very confidently, but synchrony with the rest of the ensemble is not good. She becomes concerned for synchrony when she becomes dislocated from the ensemble by a beat or more at which point she takes active steps to address the problem.

15 The orchestra plays through to the end of the piece. There has been little obvious improvement in the synchrony.

16 Mrs Barlow (to all) *"brilliant, very good, just one thing three after 'E' seconds you're on your own there so make it m. p.* [mezzo piano] *no softer. From there after two, 1,2."*

In this extract Becky plays with technical confidence (line 14) though her synchrony with the remainder of the orchestra never very precise. Despite Mrs Barlow's comments about the need to improve synchrony (line 13) little improvement in the level of synchrony is achieved (line 15). However, Mrs Barlow's congratulatory encouragement (line 16) suggests that she is conscious of the level of aural awareness possessed by young musicians at a junior ensemble level and that their aural awareness will only enable them to achieve a certain level of synchrony. Becky has however, extended her aural awareness to a level at which she can hear when she becomes "dislocated from the ensemble by a beat or more" (line 14) and when this happens she takes corrective action, without any need for Mrs Barlow to point out the synchronistic discrepancy.

This view of extended aural awareness as the catalyst for ensemble skill refinement is endorsed by Mrs Barlow. What follows is an extract from an interview with Mr Barlow, the conductor of Junior String Orchestra:

G.C. So, how is it they actually learn in an ensemble?

Mrs B Yes, well ..... I think listening to other people, I mean eventually they get to the stage where they are aware of what other people are playing, they'll be aware of whose got the tune and I think that's all learning isn't it, learning that way by listening, listening to what's going on around them.....

Mrs Barlow suggests that her young musicians learn by listening, by becoming aware of "what other people are playing." They learn to extend their aural awareness beyond their own playing. For example, pupils cannot further refine the degree of synchronisation in their ensemble playing if they are unable to hear increasingly subtle synchromatic discrepancies. As peeling one layer of onion exposes the next so an incremental improvement in the level of synchrony allows the young musician to hear how synchrony can be further refined. When a level of refinement of an ensemble skill has been achieved the next level can be seen by the student, or shown to the student by the conductor or tutor. The 'extended aural awareness' skills required to hear the next level of refinement form part of the proceeding level and therefore continuous development and progression up the MLP can be achieved.

Levels of Participation

In *Chapter Five* it was argued that ensemble membership is predicated on both musical and social participation, on the musical and social interaction of members and that the learning and skill acquisition achieved in an ensemble is rooted in, and reliant on, participation. It was further suggested that there are varying levels of participation within an MLP ensemble that a newcomer's participation in an ensemble commences as peripheral and becomes increasingly central as they learn the necessary skills. Analysis of the data suggests that this centripetal motion could be divided into four categories of participation within an MLP ensemble.

Commencing with the peripheral and moving to the central these could be categorised as:

1 *The novice* – unsure, mimics the actions of others. Does not understand the reason why things happen or their purpose. Is unclear as to the cue for the action.

2 *The developing ensemble member* – is confident to act but unsure of the role of others (including the conductor) and how each contributes to the whole.

3 *The confident ensemble member* – is beginning to understand the whole and its contributors. Plays confidently, especially when not musically exposed.

4 *The central ensemble member* – confident enough to lead and play exposed passages.

The concept of peripheral participation, which develops over time into central or complete participation, is not new and was first described in a systematic way by Lave and Wenger (1991). However, when applied to learning in an MLP the theory requires modification. While there is observable legitimate peripheral participation by a newcomer to an ensemble, followed by a centripetal development towards complete participation, within an MLP this pattern is serial and happens several times during the young musician's career in the MLP. The following extract is from an interview with Mrs Barlow, conductor of the Junior String Orchestra. Here she describes how young musicians progress and develop in an ensemble.

26 Mrs B Yes I think definitely, the players of the highest standard they quite dominate it and the ones that are a little bit

uncomfortable they are quite reliant on following the people of a higher standard, I mean I think if they weren't there they would have to realize they've got to do it themselves and in some ways it can help having a good player there because they can follow them, they can follow the rhythms, but at the same time if they weren't there they would have to do it themselves and they would do it .....

27 G.C. They would rise to that.....

28 Mrs B Yes, they would do it, they would struggle at first but they would eventually do it, but then again it's the sort of growing process, the senior players will go and then they will move up and then eventually they will become the players that other people are relying on.....

29 G.C. As far as moving up the [music] centre goes, presumably the senior players then move up to the next group and become the less experienced players again.....

30 Mrs B That's right yes.

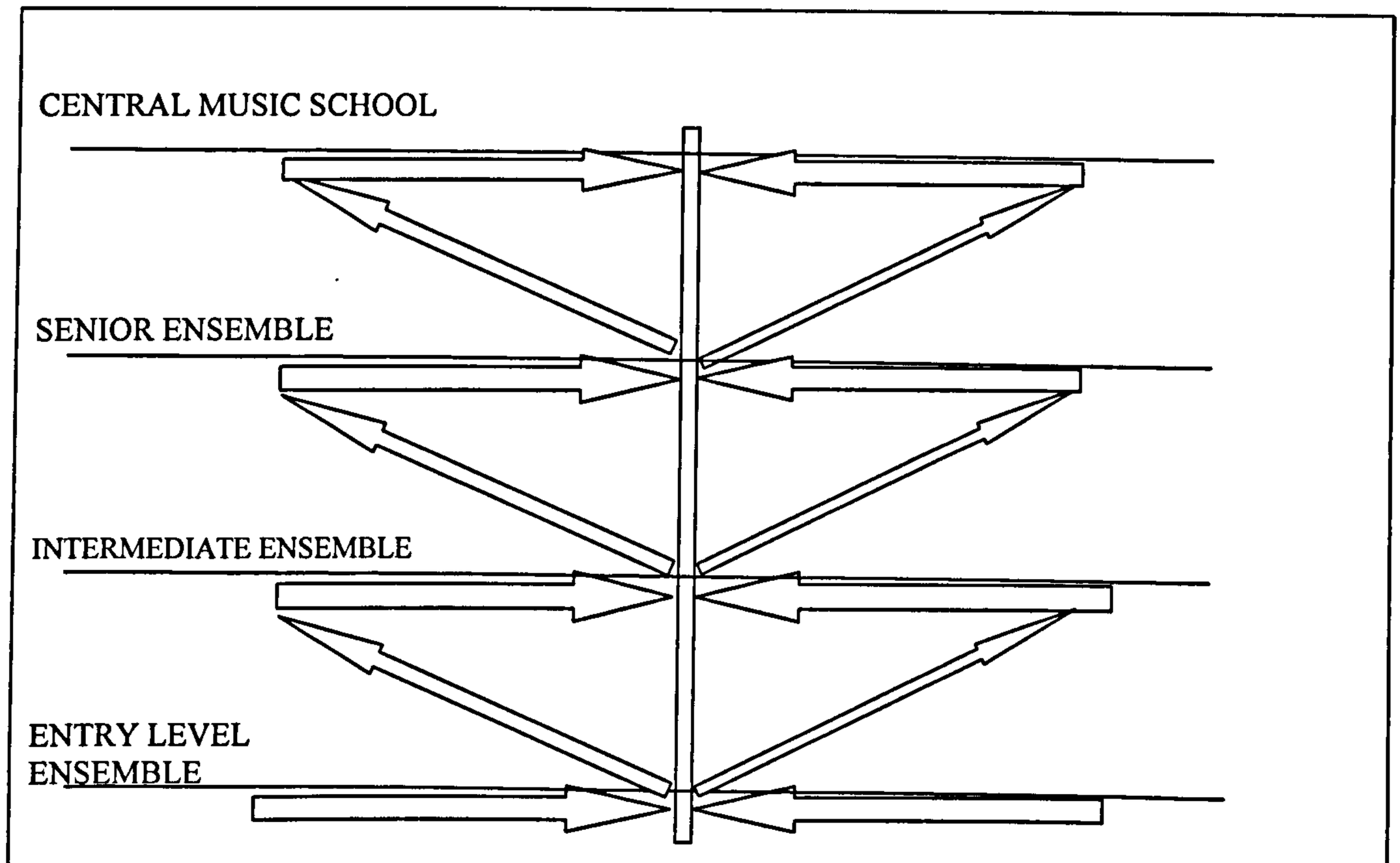
31 G.C. And just sort of expanding that point a little bit, you can actually see individuals within the group come in and be very reticent and hang back .....

32 Mrs B Yes, yes.....and slowly, over two or three years, they take the lead and then move on.....at first they'll come in and they'll just be um, sometimes they can be almost nervous to play, terrified of making a mistake but that soon changes as they become more confident in their playing and ability. Also having other people to rely on.

The individual starts with peripheral participation and moves to a more central level of participation within the ensemble. Mrs Barlow says that when new members join the ensemble they can be "almost nervous to play" and "quite reliant on following the people of a higher standard," their participation is peripheral. However, she also says, "slowly, over two or three years they take the lead," that they move from

peripheral to central participation. Arrival at a central level of participation means that the individual is ready to move on to the next strata of the learning pyramid.

Figure 6.4



Stratified Centripetal Progression – 'The Ladder of Participation'

In Figure 6.4 the whole 'ladder' represents an individual's pathway through a music centre and on into central music school each stratum represents an individual ensemble in the music centre. Each newcomer starts at the periphery of the ensemble, out at the outer edge of the stratum, with only partial participation in the ensemble. Over time the newcomer begins to take a more central role in the ensemble, moving towards the centre of the 'ladder, as their level of participation increases. When they reach full participation, the centre of the 'ladder', they move

up to the next stratum and commence the process again. It can also be seen in this context that peripherality and centrality are relative and contextual. A central player in one context becomes a peripheral player in another.

Peripheral participation by the novice is focused on the playing of the individual's own musical part or line. Peripheral players in an ensemble contribute little to the overall realization of the composer's, or originator's, intentions but concentrate on the internalisation and realization of their own musical line. In *Vignette I* (Ch4:82-83) Tim, one of the second violin players in Junior String Orchestra, is totally bemused by the pace of the rehearsal. He has difficulty finding his place in the music when required. He has to be prompted by Mrs Barlow to bring his violin into the playing position only to return it to his knee when his section of the orchestra commences playing. Only when prompted and supported by Mrs Green does he joins in with the rest of his section. Tim's participation is peripheral and could be described as 'novice' or category 1, using the categories of participation identified earlier.

Peripheral or novice ensemble members may seek synchrony with the rest of the ensemble however this is often as a device to remain 'hidden' in the ensemble. For example, peripheral players may maintain synchrony at a rhythmic level but will end notes before the full value has been achieved. What follows is an extract from an observation of Junior String Orchestra that focused on Becky (see p160):

02 Mrs Barlow (to all) *"right let's just have a play through 'Joe Clarke' without the keyboard. Right violins four bars in".*

03 The ensemble commences playing. On several occasions Becky joins a new phrase a few quavers in. Her synchronisation is not always accurate though she looks at Mrs Barlow regularly and particularly at each phrase end.

04 The ensemble plays through to the end of the piece.

05 Mrs Barlow (to all) *"that's sounding good, right I'll play the keyboard with it, just play your first note 'cellos'* [this they do] *right"*. Mrs Barlow commences playing the four bar introduction on the keyboard

06 Becky ends several phrases with a quickening up-bow. Again Becky rushes towards the end of each phrase and consequently plays the last note of each phrase slightly early.

07 Mrs Barlow (to all) *"right lets play 'Skip to my Lou' right, between sections you've sometimes got four bars rest and you've got four bars rest at the beginning. Right, here we go"*.

08 The ensemble commences playing. Becky shortens the last note of each phrase.

09 Mrs Barlow stops them (to all) *"are you playing the pizz?"* [the ensemble members nod]. *"Oh! I couldn't hear you. I'll play* [on the keyboard] *the four bars before it* [the pizzicato section] *again, here we go"*.

In this excerpt Becky joins a new phrase a "few quavers in" on several occasions (line 03). She also "shortens the last note of each phrase" (line 08). By entering a phrase late and finishing it early Becky is able to remain hidden in the ensemble. She can leave it to others to lead and be musically exposed while she develops her confidence and learns the skills she will need in the ensemble.

Novices may also remain dynamically below the negotiated ensemble dynamic level. Each ensemble arrives, by negotiation at agreement as to the level of dynamics within the ensemble. For example, how loud forte is, or how soft piano is, and what

the degree of variation between the two is. The novice keeps their personal dynamic levels below these. They may start passages with a weak note or commence playing a few notes into a phrase. They accept the realization negotiated by more central players. Novice players focus on their input into the ensemble rather than on the output of the ensemble. They concentrate on internalising the composer's or originators intentions and then externalising this through their instruments. The peripheral player is less concerned with the performance of the ensemble. The excerpt below is extract from an observation of Junior String Orchestra:

13 The ensemble commences playing from the beginning of the piece.

14 Tim looks at his fingers on his violin neck every time he changes finger position. His note values are often short of the written value, particularly during passages including longer value notes. He also rushes to the end of each phrase and as a consequence reaches the last note of each phrase early.

15 Though these actions and discrepancies can be viewed they are difficult to hear as he appears to maintain a dynamic level considerably lower than that of the other ensemble members.

16 Tim concentrates on his sheet music, never looking at Mrs Barlow.

17 Mrs Barlow (over the orchestra playing) *'wait, violins not too early….. watch'*. Tim's eyes stay fixed on his sheet music.

18 Mrs Barlow stops them shortly after rehearsal mark 'C'.

Tim showed 'novice' behaviour by maintaining a dynamic level "considerably lower than that of the other ensemble members" (line 15). Tim exhibits further 'novice' behaviour by concentrating on internalising the composer's or originator's intentions and then externalising them through his instrument. He "looks at his fingers on his

violin neck every time he changes finger position" (line 14). He was trying very hard to play his musical line correctly and thereby get his input into the ensemble right. However, he appeared less concerned with the performance of the ensemble. He rushed "to the end of each phrase and as a consequence reaches the last note of each phrase early" (line 14). He rarely looked at Mrs Barlow, the orchestra's conductor even when she called out for the violins "watch" her (line 17). Tim's focus is on his own input rather than on the orchestra's output.

As ensemble members move through the categories of participation identified earlier, from novice towards central participation, their focus moves from the realization of their individual musical line to the realization of the synchronised whole. Their individual dynamic level becomes congruent with that of the negotiated ensemble dynamic level. The central, or category 4, players take responsibility for commencing phrases and sustaining notes to their full value. This leadership role is also seen in the physical demeanour and body language of the centrally participant player. They often indicate entries with body or head movements and establish eye contact with the conductor or other centrally participant players at key moments in the music.

As well as there being the need to develop ensemble skills in order to progress to the next stratum there is also an element of learning conventions applicable in a particular ensemble. Along with the need to develop the ensemble skills required to move to centrality in an ensemble the young musician needs to develop contextual

understanding. An ensemble is an ongoing social and musical interaction, the learning in the ensemble is not simply handed down from seasoned campaigner to novice, as is traditionally perceived in an apprenticeship, though the novice needs to catch-up to the shared experience and understanding that is the ensemble. More senior ensemble members share their competence with junior members. Ensemble members interact, negotiate new understandings and learn from each other. Novices are integrated into the ensemble, engage in it both socially and musically and then, in their own way, perpetuate and develop it.

Stratified centripetal progression is also representative of the journey made by pupils from musical dependency, at the base of the 'music learning pyramid', through to a level of musical independence at its summit. At the base of the 'pyramid' the young and inexperienced ensemble musician is dependent on teachers, conductors and tutors for analysis and evaluation of the ensemble performance. They are also dependent for the negotiation of a realization of the composition. However, through a process of stratified progression, which includes periods of peripherality and observation and other periods of centrality and leadership they progress up the 'pyramid'. At the summit pupils' have achieved a level of musical independence that enables them to analyse and evaluate their own, and the ensembles performance as well as participate knowledgeably in the negotiation of the realization.

Collaborative Realization

The aim of the ensemble is to 'realize' the composer or originators intentions. However, a composition for ensemble is not a self-contained object, there is a nexus of perspectives of it and it is in the understanding and meaning of the different perspectives that the composition obtains meaning. There is no absolute or definitive realization; the performance of a musical composition is jointly shared and owned by a partnership. The composer or originator has jurisdiction over what is composed and once composed the score becomes relatively 'fixed'. The ensemble members, both individually and collectively, have jurisdiction over what is performed and unlike the score this realization will vary from ensemble to ensemble and from performance to performance. The listener to the performance has jurisdiction over what the composer's intentions, as realized by the ensemble comes to mean to them.

Ensemble members have jurisdiction over what is performed, and to achieve a performance requires participation and negotiation between members of the ensemble. Participation and negotiation involves discovering how to engage with the ensemble and its members, what works and what does not, and establishing the roles of others. It also involves aligning participation and learning in order to hold one another accountable to the negotiated realization and trying to understand the composer's, or originator's, intentions and reconciling conflicting interpretations of what the music is about. Agreement in the sense of literally shared meaning is not a pre-condition for negotiated realization. A negotiated realization is not a shared realization in the sense of the same mental models. Indeed, mismatched

interpretations or misunderstandings need only be addressed and resolved directly when they interfere with the negotiated realization. Even then they are not just problems to be resolved, but occasions for the production of new meaning. Sustained participation in an ensemble generates the co-ordinated meanings that allow it to proceed.

Participation and Negotiation

Centrally participant players take responsibility for ensuring that a realization of the whole is negotiated. Negotiations within an ensemble may be verbal but are more often musical. Both conductors and players will sometimes lead, for example, a player may articulate a phrase in a certain way creating a stylistic nuance that is then adopted by the rest of the ensemble. As with all discussions and negotiations individuals may be quite insistent on some matters and be reluctant or even unwilling to compromise on that part of the realization. In other areas the individual may be ambivalent or even undecided or unsure and is therefore prepared to accept the realization of others. If two or more different realizations are evident there must be compromise if a shared realization, which is an essential requirement of ensemble playing and performance, is to be achieved. A collaborative realization implies mutuality, 'this mutuality does not, however, entail equality or respect' (Wenger 1998:56). The relations between pupils and staff, player and conductor, child and adult 'are mutual in the sense that participants shape each other's experiences of meaning' (ibid:56). However, these experiences of meaning are created within a hierarchical social structure. For example, conductors, tutors and central players

within an ensemble will be more influential in the process of negotiation than peripheral, or novice, players.

Much of the communication in ensembles is 'top-down'. In both vignettes (Ch 4:76 & 87) the overwhelming amount of verbal communication and musical direction comes from the ensemble conductors. It is indicative of the leadership and training role of conductors and tutors in MLP ensembles that they guide, suggest and co-hearse the young musicians in their charge through to a collaborative realization. Indeed much of the shape and interpretation of the music will be dictated by the conductor and tutors. However, a collaborative realization requires agreement from all members of the ensemble. If collaborative realization is to be achieved the young musicians have to do more than simply accept the performance suggested by the conductor, they must actively participate in that realization. Indeed the young musicians will shape the performance in many ways. For example, the technical limitations of inexperienced or more peripherally participant players, may influence the conductor's choice of tempi for the performance. This hierarchical social structure lends support and guidance to the musicians; however, it does not release them from the necessity to negotiate the level of ensemble between them. This level will, to some extent, be reliant on the extent of their aural awareness but will always require awareness of, and attention to, the musical contribution of other ensemble members along with a willingness to subjugate the individual contribution to the greater whole.

What the young musicians acquire, as they progress to central participation within an ensemble and as they move through the various stratum of an MLP, are the skills required to negotiate and participate in a musical realization. They achieve an understanding of the collaborative realization process, what their personal contribution should be and what is the contribution of other ensemble members. The young musicians create ways of participating in the process of collaborative realization and thereby contribute to making the ensemble what it is. The skills required to complete all the stages of the process of achieving ensemble through to collaborative realization is only that required for the level of strata of the ensemble. For example, the level of shared understanding and synchrony achieved by a junior ensemble is not as precise or as informed as that achieved by a senior ensemble. Also the demands of the repertoire, both technical and musical and the level of negotiation required, progressively increases, as the ensemble becomes more senior.

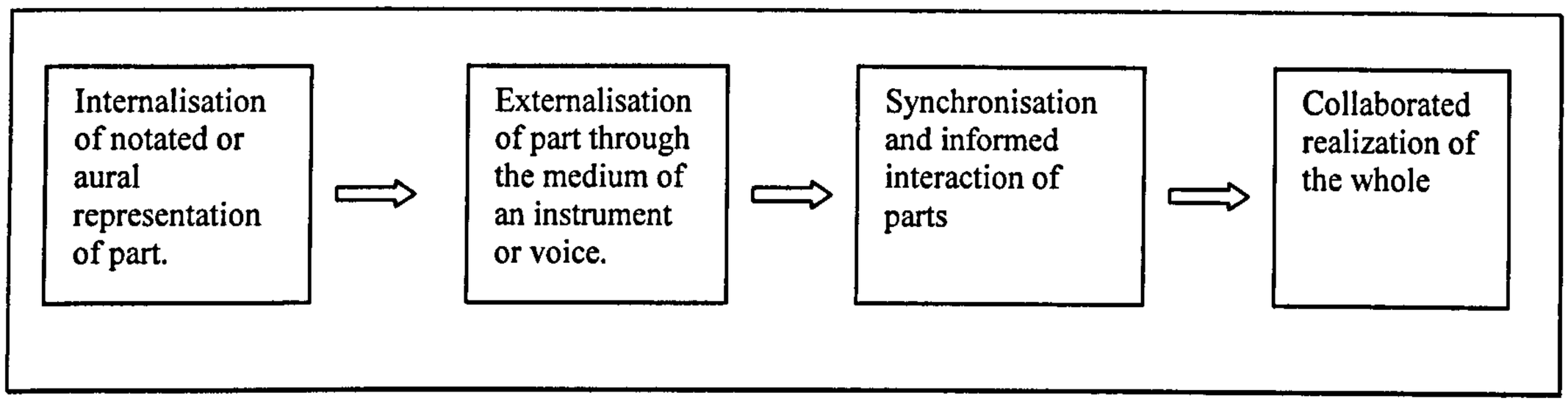
The Route to Musical Realization

The evidence in this research suggests that the negotiation of a collaborative realization is the final stage in the process required to take a piece of music from the point of its introduction to the ensemble, through to performance. Analysis of the data suggests that the 'route to musical realization' can be described as a four-stage process (see Figure 6.5, p175). First, the abstract representation of the composition must be understood and internalised. This representation would most commonly be a notated form of the music but could also be a memorising of the musical line.

Second, the internalised musical line must be externalised, turned from abstraction

into sound, through an artefact like a musical instrument or via the voice. This, of course, requires that the individual possesses the technical skill on their instrument or voice required to produce the musical line.

Figure 6.5



The Route to Musical Realization

In *Vignette II* (Ch 4:90) Mr Lovell asks the flute section of Senior Concert Band to play a phrase using the articulation he had demonstrated, as they are about to play Denise, the principal flautist, remarks that she would "like to be able to play the notes first." This remark was not meant literally, there were no individual notes in the passage that Denise could not play. However, the passage contained some complex rhythms and difficult intervals that were not simple to read or play. Denise was saying that before she was able to focus on synchronisation and interpretation of the music she needed to be confident of the technical aspects of producing the sounds the composer intended. Before she could synchronise and negotiate a collaborative realization she must internalise the notation and externalise her musical line.

During the third stage of the 'route to musical realization' the differing musical lines and sounds are synchronised so that they weave together to produce the composer's or originator's intentions. Finally, through a process of negotiation a realization of the musical whole is agreed to which all ensemble members contribute. Individuals with high levels of ensemble skills will be focused on the latter stages of this process while inexperienced ensemble members will be more focused on the early stages of the process. Novice or peripheral ensemble members may rely, almost completely in some cases, on experienced or central ensemble members to complete the latter stages of the process on their behalf. It is necessary, if ensemble is to be achieved, for some members of the ensemble to complete the whole process. The more members that complete the process, or are focused on the latter stages of the process, the higher the level of ensemble achieved.

The 'route to musical realization' has similarities of framework with the 'rehearsal trajectory' discussed in Chapter 5. This is not surprising as both are attempts to describe and understand how a piece of ensemble music is realized and given meaning. The 'rehearsal trajectory' explores the structural and musical aspects of achieving performance, whereas the perspective taken in the 'route to musical realization' is that of the individual and the social group. The 'route to realization' explores the skills and skill application required to achieve ensemble performance.

Performative Responsibility Transfer

As the central or more experienced members of an ensemble leave to move up to the next stratum of the MLP, the performative responsibility, the responsibility for ensuring a collaborative realization, is transferred to the next most central group of players in the ensemble. This then makes them central within the ensemble. Failure of some ensemble members to take responsibility for the completion of the process of musical realization would mean that the group could not achieve performance. At the point and time of performative responsibility transfer the newly created central players may not feel that they possess the skills required to become role models to more peripheral ensemble members, or to take responsibility for the collaborative realization of the musical performances of the ensemble. However, observations made as part of this research suggest that the newly created central players do seem to be aware, albeit at an unarticulated level, that musical performance is reliant on at least a group of musicians within an ensemble focusing on ensemble output rather than individual input. The data also suggests that regardless of technical competence or personal confidence all newly created central participants are prepared to take performative responsibility.

The excerpt below is taken from an observation of the Junior String Orchestra. The rehearsal took place early in a new school year. Several members of the ensemble in the previous academic year had recently moved up to the next strata of the MLP, and several new members had joined the ensemble. This was the second rehearsal with the changed membership of the orchestra. Mrs Barlow is the orchestra's conductor,

Jessica and Beth sat on the first desk of first violins and Leanne sat on the first desk of 'cellos.

49 Mrs Barlow [to all] *"good, that's it, right let's leave that one. Now we started looking at the String-Along-Rock...."* The ensemble members look for the appropriate sheet music.

50 As the orchestra settles down ready to play Mrs Barlow notices that the first violins are writing the notes names under the notes on their part.

51 Mrs Barlow [to first violins] *"oh come on girls, don't write all the notes in, you know these notes"*. They stop.

52 Mrs Barlow [to all] *"we'll go about this speed"*. She plays the first four notes on her violin. *"Here we go, three, four"*.

53 The piece has alternate bars of tutti followed by first violins playing on their own. The first violins struggle with the soli sections and are led through with prompting and singing from Mrs Barlow. The orchestra plays through to the end of the first section.

54 Mrs Barlow [to all] *"okay, let's play all the bits we play together"*, [to first violins] *"don't play the bits on your own in the middle"*.

55 The ensemble, including the first violins, plays the tutti sections of the first passage successfully. Mrs Barlow [to first violins] *"right, first violins a bit slower"*.

56 The first violins commence playing from the beginning. Mrs Barlow plays along with them, prompting and calling out note names and fingerings where necessary. They play through to the end of the first section.

57 Mrs Barlow [to first violins] *"see, it's not that difficult"*. Jessica [to Mrs Barlow] *"it is when you go fast"*.

58 Mrs Barlow *"well, let's try it slower then"*, [to all] *"everybody, one, two, three, four"*.

59 The orchestra plays from the beginning to the end of the first section.

60 Mrs Barlow [to all] *"good, I think this piece could be very good. Right can we play the last two bars, we won't do the middle section tonight, and then back to the beginning. What does DC al fine mean"?*

61 There is no reply so Mrs Barlow explains the instruction DC al fine.

62 Mrs Barlow [to all] *"good, so we are going to play the last two bars of the piece and then go back to the beginning, ready, here we go, three, four".*

63 They commence playing the last two bars but only the first violin section goes back to the beginning and continues playing. The remainder stop at the end.

64 Jessica [to Mrs Barlow] *"we should be going back to the beginning, shouldn't we?"*

65 Mrs Barlow [to all] *"yeah, back to the very beginning, let's try again, three four."* They commence playing. Mrs Barlow plays the first violin part on her violin and prompts as before. They play through to the 'fine'.

66 Leanne [to no one in particular] *"that's good that".*

67 Mrs Barlow *"yeah, right, we'll do the middle section next time so have a look at it at home. Right, let's have a look at this Carnival Time".* She gives out the music.

68 Mrs Barlow [to all] *"right, lets have a look at this Street Sellers. Right, it's the Hot Cross Buns tune".* She plays the tune on her violin *"and we all have that tune at some point. Okay, first violins lead, the rest of you have four bars rest, it's a round".*

69 They commence playing. When the second violins enter the round they play strongly but rush the tempo and the round comes apart.

70 Mrs Barlow *"okay from A".* They commence playing from rehearsal mark A. Mrs Barlow prompts and calls out entries to the various sections.

71 The orchestra plays through to the end of the round.

72 Mrs Barlow *"yeah, seconds you're just rushing. Can I have seconds from the third bar after four. Three, four".*

73 The seconds play their part of the round holding the tempo much better, though with Mrs Barlow's assistance. Mrs Barlow [to second violins] *"that's better"*, [to all] *"everybody from A again"*.

74 The round falters after only two bars.

75 Mrs Barlow [to second violins] *"yeah seconds, you're rushing"* [to all] *"everybody from A"*. They take a few moments to get ready, *"A, this is everybody"*.

76 They commence playing. The violins make their entry a few beats early just before rehearsal mark D.

77 Mrs Barlow [to violins] *"no, not yet"*. The orchestra stops playing.

78 Beth [to Mrs Barlow] *"we're counting it wrong"*. Mrs Barlow [to violins] *"you're rushing the count in the last bar before D"*. Mrs Barlow [to all] *"let's go from A. Three, four"*.

79 They commence playing. Mrs Barlow prompts and gives cues to entries. Once again the violins enter early before D and the round breaks down.

80 Mrs Barlow [to violins] *"okay, first and second violins can you play me what you're playing at A, I'll play with you, okay, three, four"*.

81 Mrs Barlow plays along with the violin section she indicates entries and movement with her head. She plays strongly to give a lead. They play through to rehearsal mark D where Mrs Barlow stops them.

82 Mrs Barlow [to all] *"right, lets do it all the way to D"*. They commence playing but it is immediately obvious that they have not all started for the same place. They stop.

83 Jessica [to Mrs Barlow] *"from the beginning to D"?*

84 Mrs Barlow [to all] *"yeah, from the beginning to D. Here we go, three, four"*.

85 They play through to rehearsal mark D where Mrs Barlow stops them. Mrs Barlow [to all] *"and we're at D, good. Let's go from D its faster here"*.

86 [She plays the beginning of the next section on her violin] *"its got that dotted rhythm. How many counts has a dotted note got?"*

87 Jessica *"half again"*. Mrs Barlow [to all] *"that's right so you'll play a long note followed* by *a short note. Here we go after four, one, two, three, four"*.

88 They commence playing from rehearsal mark D. Mrs Barlow prompts throughout.

Performative responsibility transfer had taken place on the violin section with the three most senior members of the section having moved up to the next stratum. The newly promoted, and newly created central participants on the first and second desks of first violins were nervous and uncertain and found much of the first violin music technically too difficult for them. At the beginning of the excerpt the first violin's uncertainty is demonstrated by the action of writing note names under notes with which they are familiar (lines 50-51). Things appear to be happening too quickly for them (lines 53-60), and they struggle throughout the rehearsal. However, they were still prepared to take responsibility for the output of the ensemble. Jessica (lines 64 and 83), and Beth (line 78) asked questions and sought clarification of matters that they had demonstratively understood themselves but that had been misunderstood by others. For example, the first violin section was the only section of the orchestra that had understood the instruction 'DC al fine' (line 64). Jessica's aim in seeking clarification was to ensure that the ensemble shared the understanding of the performance. The technical demands and problems with producing their own input, or musical line, did not prevent the newly created central participants from being aware of, and furthermore taking responsibility for, the output or performance of the ensemble. These same individuals had been singularly quiet during

observations of the ensemble's rehearsal in the previous year when their position within the ensemble had been more peripheral.

Members of more senior groups would begin to focus on collaborative realization at a much earlier point in their progress through the ensemble than would a member of a junior ensemble because they have already taken performative responsibility in another, more junior ensemble. This would lead to a greater number of members of senior ensembles taking responsibility for collaborative realization this, along with their more refined ensemble skill level, produces a higher standard of ensemble playing.

The gap, in terms of relative levels of proficiency, between novice and old-timer in an MLP ensemble is not large, often only a year of centripetal participation separates their levels of attainment. The movement from peripheral to more central participation often happens at a specific point in time and is controlled by forces external to the ensemble. This is usually when old-timers move on to more senior ensembles, the novices of the previous year become the new old-timers and a new intake of novices joins the ensemble. The change of status for the ensemble members who remain, the point of performative responsibility transfer, though abrupt, represents only a small shift in overall attainment levels. However, these step changes happen frequently, at each stratum level, so producing several geared developmental cycles.

Therefore, new members join an ensemble and, for a while, they are legitimately peripheral, while they learn the behaviours and musical demands of the ensemble from more senior and central members. As they develop and refine their ensemble skills they move through the categories of participation described earlier. After a time, due to the transfer to other strata of the MLP of central members of the ensemble, the new members, whether they feel ready or not, assume central status and they assume performative responsibility to the level required at that ensemble level. At the same time, their newly acquired central status makes them role models for new entrants to the ensemble. When the now central member's time for transfer to the next ensemble level comes they pass performative responsibility for completing the process of achieving ensemble on to their juniors. These, now former central members, assume a peripheral level of participation at the next ensemble level, and so on until they arrive at the top of the 'ladder of participation'. The legitimate level of peripherality and the level of focus on collaborative realization changes as the students move up the rungs of the ladder. The level of peripherality legitimate at the junior level would not be acceptable in a senior ensemble. Likewise there would be a greater level of collaborative realization in a senior ensemble compared to a junior ensemble.

The data in this study suggests that learning in an MLP is a process of serial centripetal progression, that is, that young musicians move from peripheral to central participation in several, increasingly more advanced ensembles. The data further suggests that learning momentum is maintained within this process in two

key ways. Firstly, by ensemble transfer; membership of a new ensemble allows the young musician to be legitimately peripheral for a period during which they can observe and copy the behaviours and skills of role models who are one or two years more experienced than themselves. Secondly, and as a consequence of ensemble transfer, by performative responsibility transfer, by having to become a central participant who takes responsibility for the product of the ensemble and becomes a role model for more peripheral players, whether the individual feels ready or not. Each individual is only required to attain the behaviours and take the level of performative responsibility required of that particular stratum of the MLP. The strata break down the learning and refinement of ensemble skills into manageable pieces. The individual develops and refines their ensemble skills to the level required of the stratum, and in the process is fully engaged in the ensemble and is a full contributory member to the ensembles product. Having achieved that level of skill refinement and performance they then move on to the next stratum of the MLP.

Chapter Seven

CONCLUSION

This chapter does not set out to provide a conclusion as the pinnacle of this research project. This has been a comparatively small research study in what is a complex and largely un-researched field. Therefore, it would be exceeding the limitations of the study to reach any conclusions and would also attempt to bring closure on a discussion that has not yet commenced. The purpose of this chapter is to summarise the research findings, examine any implications and suggest questions emerging from the findings. It is hoped that this is the beginning of a debate, not the end of one.

Ensemble Membership

This study uniquely approaches ensembles as 'socio-musical' phenomena. It finds description and explanation in the constantly changing and developing socio-musical interactions that form ensembles. Using an ethnographic approach it examines the practice of MLP ensembles through the eyes and actions of ensemble members. Ensemble membership and playing in an ensemble are by their very nature social activities. It is the social and musical interaction and negotiation between the individual members that creates performance. Therefore any

explanation of the way in which young musicians learn ensemble skills within an MLP must take account of the social context and social nature of that learning. The acquisition of knowledge and skills by young musicians in an MLP is not merely learning that happens to be situated in a particular setting, it is learning that is reliant on its placement within the setting. It is also the learning of knowledge and skills that are, to some extent, created within the setting.

Not only is the learning situated in a social setting, the product of ensemble participation - performance - is reliant on a community held, rather than an individually held, body of knowledge and skills. Many different skills and knowledge come together to create ensemble performance. For example, the skills and knowledge of the percussionist are different to those of the violin player. However, both the violinist and the percussionist, along with other ensemble members, are required to apply their particular knowledge and skills simultaneously and co-operatively in the production of performance. The skills of ensemble are those of co-operation and negotiation which facilitate a shared realization of the musical whole. These skills are social both in nature and action. As the pupil moves from novice to more central participation within an ensemble they are learning the knowledge of that ensemble. The knowledge they acquire is both historical and dynamic. It has been shaped by previous ensemble members and will continue to change and develop. The knowledge learnt by the young musicians is both universal, it is shared with other similar ensembles, and also local and particular to their ensemble. As they develop their skills within the ensemble they are learning the

skills required to participate ever more fully in the ensemble. At the same time they are also shaping the knowledge and history of the ensemble.

Little, or no, research has been undertaken before into the nature of learning in an MLP ensemble. Therefore, one of the first aims of this study was to describe and understand the nature of ensembles and the setting of a rehearsal as a necessary step to describing and understanding the learning process that is itself an integral part of the setting. This research examines MLP ensembles as learning environments and how the teaching and learning that happens within them forms part of the musical and technical development of the young musician. This research views MLP ensembles as communities of practice which provide structured forms and relations through which a novice can progress to a position of central participation within an ensemble.

An MLP ensemble is a social environment that facilitates and structures the learning process that takes place within it. It is suggested that an ensemble is reliant on changing social structures and interactions rather than artefacts and physical placement, and that it is these structures and interactions that form the ensemble. Though artefacts are important to an ensemble, and some actually direct and constrain the ensemble's evolution, it is the social interactions and structures that are shared and constantly given new meaning by ensemble members that give identity and uniqueness to an ensemble. It is a setting that is dependent on the contributory actions and shared aims of its membership. In order for the members of ensemble to make music together there needs to be a shared understanding and experience of the

ensemble. This shared understanding is at any one time only a 'snap-shot' in a constantly changing and evolving understanding of the ensemble.

The data in this study suggests that it is participation within the ensemble that confers membership. A young musician cannot acquire membership simply by claiming it. However, the experience of participation is not uniform. Ensemble members are all individuals. What each brings to the ensemble is different, varying levels of experience and technical ability, various expectations and varying reasons for membership. Similarly, each ensemble member experiences the ensemble differently. The place in which the ensemble member sits within the ensemble will affect their experience of the music. The level at which a player participates will give differing experiences. What creates ensemble is mutual engagement and participation not homogeneity.

This research suggests that ensemble rehearsals operate in one of five modes; exploration, reaffirmation, instruction and modelling, synchronisation, and administration. The data also suggests that the transformation of a piece of music, from its introduction to the ensemble members, through to its exhibitionary performance, can be described in a 'rehearsal trajectory' containing four elements; familiarisation, instruction and modification, synchronisation and finally performance. These typologies of rehearsal, representing different cross-sections of the same whole, provide a conceptual tool for further exploration and understanding of ensembles and ensemble based learning.

Ensemble Specific Skills

This study has, for the first time, identified a group of ensemble specific skills. These skills enable the musician to negotiate, integrate and cooperate with other participants in the production of ensemble performance. Analysis of the data identified nine categories of skill that are present in ensemble playing and are not found, or are found at a much lower skill level, in individual instrumental playing. Higher level analysis of the data suggests that each of these skills contribute to one or more of three ensemble specific activity categories; synchrony, negotiation and communication, and convention and practice. This three category typology is not simply a clustering of the nine ensemble specific skills. Indeed, some individual ensemble skills can be placed in to more than one activity category. Rather, these are the activities enabled by the nine ensemble skills. These three activities emerged from the data as the activities specific to ensemble that form the shared knowledge that is required to connect the various individually held knowledge that is required to create ensemble performance.

Consideration of ensemble specific activities highlights the interactional nature of this framework. These three ensemble activity categories reflect skills of musical and social interaction and participation. They identify shared practice and realization arrived at through interaction and negotiation. These categories suggest that ensemble specific activities are 'socio-musical' skills that are used to facilitate interaction between ensemble members in order to produce a collaborative

realization. They suggest that the distinction between musical and social skills become blurred when music making is participatory.

Learning in an MLP

This study has examined how ensemble specific skills are acquired in MLPs. As with other aspects of ensemble participation there has been little, or no, previous research into learning in ensembles and the acquisition of ensemble skills. The data in this research suggests that the specific skills of ensemble playing are acquired by participation in an ensemble, be that two or three children playing together in an instrumental lesson or sixty young people playing together in a youth orchestra. The ensemble setting ensures that the learning that happens within it is situated and practical. By their very nature the skills acquired in an ensemble setting are immediately pertinent and consequential. While the expressed purpose of an MLP is to develop the ensemble skills of the individual pupil, it can appear that progression is nothing more than a by-product of the realization of musical performance, with the learning needs of the individual being subsumed into the musical need of collaborative realization to achieve ensemble performance. However, this study suggests that the primary purpose of an MLP is to provide a structure in which a young musician can acquire ensemble skills. The progress of individual pupils is viewed in terms of promotion to the next rung of the 'ladder of participation' into ever more senior ensembles that perform ever more musically and technically demanding repertoire. Indeed, it is this act of transfer and displacement and the changing of personnel that it creates which contributes to the learning process.

It is posited here that the learning process within an MLP ensemble is one of serial performative responsibility transfer created within a stratified centripetal progression. New or novice members of an ensemble start by participating at a peripheral level. While at this level of participation in the ensemble they observe, copy and develop the behaviours they see in senior ensemble members. They are able to 'soft-pedal' and 'take-chances' in order to develop their ensemble skills and leave others to take performative responsibility for the production of a negotiated collaborative realization of the musical intentions of the composer. As the novice ensemble member becomes more skilled and confident they begin to participate more fully. At some point the central or more experienced players leave the ensemble to move to the next stratum of the MLP. At this moment performative responsibility is transferred to the next most senior group of players, who, in their turn, take responsibility for the collaborative realization of the composers intentions and act as role models for the novices joining the ensemble. This cycle is repeated several times as the young musician makes progress through the strata of the MLP. This explanation does not diminish the crucial role of the conductor or tutor in the direction, correction and information they provide to the individual musician. However, it is the serial point of performative responsibility transfer that creates the environment and impetus for ensemble skill acquisition and development.

During their passage through the various strata of the MLP pupils move from musical dependency through to a level of musical independence. When young musicians first join an MLP they are reliant on conductors and tutors to analyse and

evaluate the ensemble performance and make corrections and suggest improvements. As they move up the strata of the MLP the young musicians become increasingly more able to analyse and evaluate ensemble performance for themselves. This journey from dependency to independence can also be observed in the negotiation of performance. In junior ensembles much of the negotiation of the realization is led, and sometimes even imposed, by the conductor or tutor. However, in more senior ensembles the members participate more in the negotiations of the realization and at the same time are more knowledgeable about that participation.

The proposition offered here can find its influences in the work of Lave and Wenger and social theories of learning. However, this proposition departs from these theories by suggesting that the learning process within an ensemble is responsibility led and stratified. It is suggested that after a period of peer observation and modelling by more senior ensemble members, along with assistance and guidance from more expert adults, the young musician takes on a more central role within the ensemble, along with the responsibility for the collaborative realization of the music. It is by this process of taking responsibility that the young musician develops. The taking of responsibility does not confer mastery on the young musician, that may be a long way off, but it does enable the development of skills observed and modelled previously at the standard of achievement attained. The young musician is able to move to a more central position within an ensemble before once again assuming a peripheral position at a more advanced level.

The interaction between ensemble members is vital to the learning process. In an MLP this process is reliant on groups of individuals in the ensemble adopting certain behaviours. There is a need for multiple role models, who lead by example and model practices for novices, a function that the novices, after performative responsibility transfer, perform for others. This process is not the handing down of given knowledge. What is learnt by novices is the shared history and community practice of the ensemble. This knowledge is not held by, or reflected in, any one individual. It is also not static, as it is modelled and observed it is simultaneously developed and reinvented.

Implications

Further research needs to be carried out in the area of music ensembles in education, using a variety of approaches and methodologies, in order that a more complete understanding of their processes may be achieved. Further research also needs to be undertaken to test if performative responsibility transfer is also a satisfactory explanation for the learning of ensemble specific skills in structures other than MLPs.

The majority of LEA music services have built their instrumental provision around two points of contact with the student; the instrumental lesson and participation in a progressive ensemble provided in music centres. Both activities help children develop technical and ensemble skills. However, each activity has a different focus and intended outcomes. The instrumental lesson focuses on the development of the individual while the progressive ensemble is focused on the musical output of the

ensemble. Therefore, a clear understanding of the skills acquired at each point of contact and the processes by which they are acquired is necessary if effective teaching/learning strategies are to be devised that facilitate the most effective learning in both setting for young instrumentalists.

APPENDIX 1

Example Interview Transcripts

Four example interview transcripts are included here. Two are transcripts of interviews with ensemble leaders, one a first interview, the other is the second of two interviews with the interviewee and two are transcripts of interviews with ensemble members, these were undertaken as the young musicians 'packed away' after an ensemble rehearsal. The interview transcripts are placed in chronological order and place names and the names of the interviewees have been changed.

KEY **/** **= interruption**
_____ = indecipherable word(s)
[ ] = presumed word(s)
..... = period of silence
// = two people speaking simultaneously

Mr Singh - Leader Intermediate Harmonium Group

Interview 1

8th Feb 2001 (Interview held in the Music Service central building)

1. G.C. How you make decisions about balance between detail and general shape of the piece, when do you let something go, how do you make that decision.

2. Mr S. The first thing I need to figure out is how intelligent the student is. How far he has gone the basic thing is if he has learnt all the names of the notes and he understands the length of the note and the beat when all these things he understands then I can make a decision which composition I have to give him or her. Does he or she understand all the things what actually I wanted to teach and that way I start him in this group, with the intermediate group as well.

3. G.C. Do you think it's something to do with the individual or more with the group? Do you make decisions based on how competent the individual is or on the general standard of the ensemble?

4. Mr S. First thing is with the individual, because they are in different groups and I have to decided how he/she is understanding the lesson, so once they are of that standard then we can move them into the intermediate group.

5. G.C. So it's about putting them into the right group in the first place.

6. Mr S. Yes.

7. G.C. The amount of technical language you use when – I notice when I was watching your rehearsal last time, you seem to vary the amount of technical language you use depending on the individual, so some individuals you spoke in very technical language, it was a musical language, and others you used ordinary language – how do you take them from the point of it being ordinary language to the point when you are using technical language. How do you drip feed that in to them?

8. Mr S. Actually I try to explain them some of the language I want to use, my main aim is they understand what actually I want to get result from them, in which ever way language they understand I try to teach them, suppose I try to teach them how to bend a note, so bend the note is a simple language and then in our Asian music we can say like "mead" and some of the students you know some of those that are they are more into English and they don't understand the meaning of the "mead" and bending the note, they only understand bending the note and then practically making sure that they can bend the note they understand straight away.

9. G.C. It's a matter of communication for you. Which language you use is irrelevant.

10. Mr S. Mostly Punjabi, Hindi, Gujurate. .....

11. G.C. But the amount of technical language you use.....

12. Mr S. Yes, both times whether I'm using English or whether I'm using any Guruate, Hindu, Sikh, so they understand, I can communicate so that they can understand whatever I want.

13. G.C. Yes, but you, I noticed you were using note names with some of them, would that be in Punjabi?

14. Mr S. No that is actually in Hindi.

15. G.C. Yes, but with others you are using the Western note names, you know C, D, E ,F ,G.

16. Mr S. Yes, that I use a lot because the students they very easy understand C, D, E, F, G when its written onto the keyboards and like the chords when I have to explain them I have to tell them this is the C, this is the D, this is the E minor or major they understand both ways, they try to understand both ways and which is I think more beneficial for them in case they want to play _____with a western band it is easy to take and adopt the method.

17. G.C. Do you think there is a process by which because you are doing it in several actual languages, Punjabi, Hindi and English and because you are also doing it in certain technical languages and on the other times you are doing it in common language so instead of putting a portamento on it you put a bend on it, you might use the two words/

18. Mr S. two words and they both understand.

19. G.C. That's right, but they slowly begin to pick up what the other words mean, because you do actually – you speak to one half using a certain language and a certain amount of technical language and you'll speak to another half using another language and a different amount of technical language do you think they start to assimilate across, do they start to learn what these different things mean and different/

20. Mr S. Yes they understand more because the thing is this way if I've just taken one language because I've got so many different cultures, peoples coming over there so its nice if they can know more and more languages like you know if I speak ten languages I can get more benefit you know of those languages if I'm

just sticking to one language I don't think I can be a successful musician, or a successful teacher in that way.

21. G.C. Great can I just move on to participation levels, as I was saying earlier there is this theory that people legitimately i.e. not for reasons that they just don't want to be part of but for reasons that they are just not experienced enough, don't get fully involved in an activity and then they get more and more involved as they become more and more proficient so do you feel that within the intermediate ensemble there is different levels of participation going on, are there some people that are on top of everything, they are the people that always play it right, they are the people that always lead and there are others that stand back a little bit, are a bit unsure, do you think that is going on in that ensemble.

22. Mr S. Yes it is because the thing is here in the music centre they're not on the same level because like this somebody's turning up at half past six so he or she will try to learn the same which the lesson I have then given to _____ group. They take it over and they play.

23. G.C. So all the time they become more and more central/

24. Mr S. Yes more and more central .....

25. G.C. To the ensemble?

26. Mr S. So if somebody is running slow and if I push them a bit to run fast if somebody, my neighbour is running fast and do you know I am going slow so naturally if someone is pushing me I will run fast with him it's a matter of trying you know how fast we can push them.

27. G.C. Do you think you can just open that out a little bit then, you bring in that you've got other people trying and it pushes them along, do you think that social aspect is important, do you think the fact that they're working with other people who in some respects are dragging them along, do you think that helps speed up their learning.

28. Mr S. Yes it helps a lot, it helps a lot and the thing is the composition we are giving them they are not difficult ones, whilst they understand right it's a matter of understanding and if you struggle with them show them again and again right they can do, my experience is that in half an hour I can make a composition then

and there right and I show them and they will play you have seen them, the composition I have made it on that day, they have finished it in half an hour.

29. G.C. If you took out, because we have already said that there are some people so are more central to the ensemble than others because they are more experienced if you took out the very experienced ones, pick them off would the rate of progress be slower or would the final product be not as good.

30. Mr S. Er, no I think I can, I have got the confidence that I can make the students that are really slow, they can pick in the same time of level, they can play that tune without any problem.

31. G.C. Yeah.

32. Mr S. We need to struggle with them we need to spend time with them and when we do that definitely they can do without any problem.

33. G.C. What do you think they learn in ensemble then, what, as opposed to, you go along as an individual or group lesson we learn what fingers to put down, an ensemble is a different thing isn't it you are playing with a lot of people, performing with a lot of people, what skills do you think are particular to that activity that we learn as opposed to individual skills like which note to, and then there's obviously the oral thing isn't there the listening to others and playing with others and there is probably visual cues as well aren't there, and my perception is there is a set of skills that are unique to ensemble playing that we learn within an ensemble.

34. Mr S. Actually in Asian music its entirely different than western music right because the thing is when somebody understands the note, understand the scale of the composition easily they can follow the composition if they are good in memorising the composition and in Asian music it is quite common that quickly they can listen to the note and they can play straight away once they understand the scale of the composition like we have got ten scales to start with and once they know they understand the sounds of those scales easily they can follow the composition.

35. G.C. What I did notice is that once you went around the room you got each individual to play one section, one segment of the piece and you'd got it on the board hadn't you and you went round and got each one to play it individually

until you were happy that it was right, when you got them to do it they all played at different speeds, they played it at the speed that suited them, when you put it all together they've all got to play at the same speed and they seem to do that pretty much without having to think about it you know you set a speed and off they went, they all played together , where did they acquire that skill.

36. Mr S. That skill they acquired you know first thing when we teach them we go very, very slow so that one composition, 8 notes we can give them start with just two, just three just another three, another two and once they understand eight notes how they, it should go then they memorise straight away in few second, few minutes once they do that so first they try very, very slow and then we set the speed for them and then we ask them now you try in different rhythm patterns not just in, if I composed a composition that's in an eight beat cycle I can ask them to play in six beats now and they can make it you have seen that the eight beat composition they can play in six beats and even the eight beat composition if I asked them to play in a twelve beat cycle they can do that.

37. G.C. So where do they get that skill from?

38. Mr S. That we teach them, we show them how you know you can extend the length of the note and make the composition longer, eight beat composition how you can fir into twelve beat and they understand that and mostly some of the beats are so common and without some of the beats without teaching them we ask them listen to the speed cycle and can you try at you own to you know change the beat pattern and that straight away they'll do it.

39. G.C. Some of the finest Asian ensembles be it Indian or Punjabi whatever, the very best, when they are playing they are, they're feeding off each other, listening to each other they're absolutely together, their timing is together, their tuning is absolutely spot on, when you hear a very junior ensemble, if we go and listen to the beginner Harmoniums, those skills aren't there, when we listen to the top group we're getting closer to those skills, they listen more their tuning is better, they're more together, how do they pick those skills up as they go along?

40. Mr S. Its actually experience you know, like I've got one of there Mandolin player he has been learning Mandolin for about 14 years right on off, on off, on off, and still he cannot tune his Mandolin right because it depends upon [individual] ears how good you are and we try them to learn the tuning skill as well from beginning right, I've got a special instrument so I take it there and I tune that instrument onto one note and then I ask them now you can you know can you tune your keyboards with this note and they try to tune it and that's the

way they learn the skill of tuning as well which is very, very important, whether it's on Tabla or whether its on mandolin or keyboard or harmonium.

41. G.C. Do you think the fact that they are ..... do you think they learn from each other?

42. Mr S. They learn from each other as well but the thing is they need to learn from the teacher right that's the first skill we teach them how you can tune, if their instruments are not in tune they're no where.

43. G.C. Yes, I noticed at one stage you were playing through the tune you had done the first time I came, and one or two of them had got little crib sheets even though they told you they hadn't and the gentleman just round on the left here was very carefully watching the fingers of the girl/

44. Mr S. sitting next door.....

45. G.C. Yes that's right, and I thought then I wonder how much he is relying on watching her and learning from her, the first week you played it he would have got it, but he's forgotten it now so he's cribbing and I wondered at that level how much they learn from each other, leaned on each other, mutual support really I suppose.

46. Mr S. Yeah, yeah it is they learn from watching other musicians as well and then we actually when they are learning the tune I watch them whether they are using the right fingers or not and if they are not doing then I stop them then and there and ask them to change their fingers and use the right fingers onto the right note.

47. G.C. I noticed that um when you were talking to, I think it was the new lad who had come with his mum hadn't he, and you got him out in the middle and you were talking to him - that several of them were in a little huddle pointing at the keys and again I thought I wonder if they are mutually supporting each other you know, he didn't quite get it and rather than ask teacher I'll just ask him sat next to me and he'll point out where I'm going wrong and again you've got this mutual support thing working haven't you, you know they pull together as a team.

48. Mr S. It helps as well you know when they're learning in groups and they watch each other – oh look she joined yesterday and she can play the tune and why I can't do, so when they watch others right, they can play so quickly, so they try to pick it up you know, and they do hard work you know/

49. G.C. they [like] the competition/

50. Mr S. to get to that standard and they try and they make it.

51. G.C. Do you think that's important, that competition.

52. Mr S. It is very important if one is playing good and the other is not doing and they both are sitting together they watch each other next [day] they can/

53. G.C. They can do it?

54. Mr S. they can do it.

55. G.C. So, we are back to ensemble skills, this is the last area I wanted to look at really. If they're developing skills of listening and ensemble as in playing together do you think that is – those skills are dependant upon their technical ability, to press the right notes in the right place and all the rest of it , so do they develop along with those or do they develop separately but parallel if you see what I mean – I'm not being very clear here, do you think the skills of listening and playing together, ensemble and all the rest of it develop with their technical skills, their actual pressing the right note skills, or do they develop separately but at the same rate, in other words one couldn't go faster than the other, you couldn't be better at ensemble then you are – or do you think they develop completely separately the two areas of playing the aural stuff and the technical stuff do you think they develop completely separately.

56. Mr S. Eh, both ways separately they can do as well and then when they play together they can – it depends again upon the individual actually, I can't say somebody is good and somebody is bad, when they stick together sometime one can you know put their best ideas into it and make it more better sometimes my students are better than me. They can make better compositions than I do because my thinking is different and their thinking is different, and if they can think better than me that's all you want _____

57. G.C. You do a lot of aural stuff don't you, are very keen – you sing to them and say play me this you sing three notes and then they play you those three notes back how important do you think that – well you obviously think it's very important but do you think its possible to progress without developing those aural skills, do you think they are that important that unless you've got them you can't develop.

58. Mr S. Both ways the first thing is if somebody cannot understand which note I am singing and where that note is onto the keyboard or onto the instrument I think it is very difficult to teach somebody if they haven't got any understanding you know of note so by listening it gives then more help to find the note more – they can get more skill by listening and then finding the note onto that instrument where that note is instead of if I said where is 'A', 'A' is there and where is 'A' on keyboard, 'A' is there its very easy for them so they are not using their sense at all right, they are just reading the note and playing the note but this way they can get more idea and skills you know [that] how they can find their note.

59. G.C. So it's about making that leap from something that is a visual thing that you press something through to something that is a sound/

60. Mr S. Sound like // I think that is more better way of teaching by saying them look I'm singing this note and now you tell me where that note is right and then if I ask them go two notes higher or two notes lower right, if they understand the theory of music definitely they can do that.

61. G.C. And do you think that aural awareness that aural perception you are developing so they are aware of sounds all the time helps them improve as an ensemble they play together more they listen to each other and balance with each other etc, etc.

62. Mr S. Yeah.

63. G.C. Yeah.

64. Mr S. That helps more like you see I have tuned the Tabla drums and then I ask the keyboard player now can you find this note on your keyboard where this note is.

65. G.C. Yes you did that one rehearsal didn't you?

66. Mr S. Yeah and that's the way you know they've got an idea sometimes they struggle right but at the end if they can find it that's what we want from them.

67. G.C. Right, thank you very much indeed.

'Denise' – Principle Flautist Senior Concert Band 25th April 2001

Interview

25th April 2001 (Interview held after a rehearsal of the Senior Concert Band in the rehearsal room while 'Denise' packed away her equipment)

1. G.C. OK, can you tell me who you are, what you play and what standard you're at.

2. D. Well I'm 'Denise' and I'm a student at Ley Bank School which is in Beckley. I play the flute and the recorder and I'm also teaching myself the clarinet at the minute and so.....

3. G.C. Flute's your first study is it?

4. D. Flute is my first study, well I started with the recorder first obviously, and that was at first school when I was about nine and then when I went to middle school I got put into a recorder consort which Mrs Burton ran, and everything, and then I got into the flute from that because obviously I had some knowledge of reading music from that. So then I did flute grades two, three, four and five and obviously theory of music as well. I'm doing my grade six at that, yeah, but I decided to not do anymore flute exams after grade five because I didn't think it was going to help with anything because, well I had my GCSEs at the time as well, and obviously my school work was building up then so I decided to stop having lessons then.

5. G.C. How long ago was that?

6. D. That was three years ago now, yeah so I decided to stop having lessons then because of my exams, yeah, that was why. Yeah, so I started playing in Beginner band when I was nine, I was in year five Beginner band, at the back as

you are. Yes, progressed to the front of that and then got promoted to Junior Band when I was in year six or something, something like that, six or seven and then, again at the back, didn't know a thing, got moved forward again and, to the front and then obviously to Senior Band and that's because I reached like the top of Senior Band as first flute I decided, that that was another reason why I decided to stop taking lessons because I thought that I'd got as far as I could here and obviously I'm hoping to go to university later this year so I thought that I'm going to be leaving here, relatively soon anyway, so I thought that I didn't really need to do anymore. I didn't take GCSE music either because I thought, because obviously grade five is roughly equivalent to a GCSE anyway, so I thought since I'd got that like three years previously, I thought it would probably just, it'd just be like what I consider the boring parts of learning about the composers and when they were born and things and not the actual playing of it and things.

7. G.C. So what's different between playing in an ensemble like this one compared to playing in the junior ensemble? Is it just that the notes are harder or is it more complex than that?

8. D. Well what the, the Junior Band you play more simple rhythms and things, you never do anything like off the beat everybody here is doing things that are like, well at different times to each other, in Junior Band you tend to be playing, there's one tune at the top and then there's some middle tunes then there's one bass and its very regular sort of thing and I think that makes it a bit easier but once you get up here you're playing different things all the time so you have to concentrate much more, count more. It's generally much harder 'cause obviously there are more people here as well in this band than there are.....

9. G.C. How does that make it harder then?

10. D. Because there's more people to consider and more people, and as people come up they're of different abilities so you may have been working with one group for three terms or something but then some people may leave and others, new ones will come up and you have to incorporate them in.

11. G.C. It takes time for a band to settle down.

12. D. It does. It does yeah, and then obviously when you get a new piece or something different sections have different problems and because there's more sections it takes longer to over come the problems but afterwards it's worth it because you get obviously a bigger sound and better sound.

13. G.C. So is that the hardest thing about ensemble playing. The hardest thing to get right do you think?

14. D. I think working together and listening to other people because obviously if you're playing on your own you can go to your own sort of time and if you get stuck you just sort your own problem out and then continue but whereas if somebody else gets stuck you have to stop for them and consider them.

15. G.C. So it's fairly unforgiving in that sort of way. Great that was easy wasn't it? Thanks very much.

'Jag' – A member of the Intermediate Harmonium Group.

Interview

15th May 2001 (Interview took place following a rehearsal of the Intermediate Harmonium Group)

01 G.C. Would you start by telling me who you are and what instrument you play.

02 Jag I'm 'Jag' and I'm fifteen and I play the keyboard at the Metford College.

03 G.C. So how long have you been playing?

04 Jag Well I started here about a year ago but I've been playing, well not the keyboard but the harmonium which is very similar, for two years before that and I've been performing harmonium at Sheikh Temples and I learnt the scales from there, using the scales [ ].

05 G.C. So what sort of standard have you reached, are you a confident player now?

06 Jag Yeah I think I'm fairly confident now and I've reached quite a professional standard. The only bit that stops me to actually improvise and get something done but then again you learn from your mistakes.

07 G.C. So are you still having lessons or is this just the only thing you are doing outside.

08 Jag No this is, well for now this is the only thing, but I'll probably think of starting in one or two other places as well.

09 G.C. Do you still play in the Temple?

10 Jag Yeah, I play every now and then.

11. G.C. So tell me about your time, about your progression through the ensembles. Did you play in an ensemble in the Temple or was it just you?

12 Jag No it was just me on my own like singing hymns from the Holy Book and the main [ ] started here and learning to play in big groups and playing chords and everything I learnt here.

13 G.C. So you've been with this group (IHG) about how long?

14 Jag A year, I've been about a year.

15. G.C. You've done very well. So when you arrived here you didn't know about chords and all that sort of thing.

16 Jag Nothing about chords no. I knew a bit about the scales 'cause I was doing that earlier but no nothing any extra, 'cause from here I've been learning, because from when I used to play at the Temple I was learning hymns and certain tunes here I've been learning Asian tunes from different films and really that boosted my confidence as well.

17 G.C. So when you were in the Temple you were playing on your own, now you come into this and your playing with a whole group of people how is that different.

18 Jag Well its different because its harder to keep timing and its harder to keep everyone going with you as well and its really hard. It just can end up being daunting.

19 G.C. Is it an aural thing? Is it a listening thing? Is it difficult to listen to that many people?

20 Jag If everyone's playing like out of time its very hard but if everyone like gets together and playing in time it sounds good, but you have to get it in time and then it sounds really good.

21 G.C. Do you think at the beginning of term or you know when you get some new people in it takes a while for that group to settle down 'til they play together

or do you think they'll play together straight away? Say if we picked six or seven people who had been playing for a while and just put them together do you think they would play well or do you think they'd need time to settle?

22. Jag They need time to get to know each other you know and to get confident with the group. They need to get used to playing in a group quickly 'cause like when they are performing in front of an audience you have to play correctly, so you have to really be quick and play correctly with other people.

23 G.C. So it's about getting to know each other. Do you mean both musically and socially, or just musically?

24 Jag Well both, both are important.

25 G.C. Great, thank you very much.

Mr Lovell – Conductor Senior Concert Band

Interview 2

15th June 2001 (Interview held at Music Service main office)

1. G.C. The first question is about selection for the concert band and how it's done, what are the main criteria for selection to the concert band?

2. Mr L. Usually children are fed up through the more junior bands within the centre at the end of one year children who have reached a standard that enables them to take part in the next ensemble are then put forward for them to move into the more senior group, usually we can get children who tend to play the third part, i.e. third clarinet, third trumpet part but may stay in the junior group and play first trumpet or first clarinet, so they are getting the best of both worlds. They are getting more experience in a more advanced group so that tends to be the way it is selected, we don't have an audition process.

3. G.C. Right but you did say that people were put forward to come up, does that mean that there is some sort of nomination process or/

4. Mr L. Only that the tutors are asked who they think is ready to actually move up there and that's actually discussed because if you... the reason we do that is

we don't want to have 20 first clarinet players because they've all moved up and be left with no second and third clarinet players so we try and progress them through because it is a progression, whether its from one band to another and the same thing when they actually get into the band.

5. G.C. So how much of that is driven by the requirements, the instrumentation requirements of the band and how much driven by the child having reached a certain/

6. Mr L. Well in Beckley it tends to be when the child reaches a standard because we, the band, is small enough to take anybody who is at the standard where we feel they will gain from moving up into that next ensemble.

7. G.C. And ultimately is that your decision or is it a sort of team decision [at the moment].

8. Mr L. It tends to be a team decision with the people in the other groups.

9. G.C. Right.

10. Mr L. Yeah.

11. G.C. Thanks, so there's 4 substantive areas that we want to, that I'd like to talk to you about, and the first one of these is about the amount of detail that goes into a rehearsal and I was very interested in how you made the decision that no more could be done on say intonation or that was the level of intonation that could be expected of a group like this and therefore I will let it go at this stage, the same goes for ensemble or anything else I wondered how you arrived at those sorts of decisions?

12. Mr L. Right erm ..... personally in some aspects it would depend at what point of the rehearsal schedule that we've got fixed, if you're starting a piece one of the biggest things is actually to get all of the children from the beginning to the end so when you're first starting off a new piece of music etc. I tend to make sure we can get through the piece of music, intonation things like that , even wrong entries etc., if we can start together and get to the end it's a first step as the rehearsals get more into a programme , we tend to pick on things more and more so intonation would become more of a thing we look at, you can always tell when you're actually rehearsing a group you can always tell, or I feel you can always get to a point where however much work you do the children in the group get to a stage where they don't seem to be able to.. and it ...it's a point where you as a conductor have got to take the view that they can't take any more in, they can't get that intonation any closer and that particular point. It isn't

something that you actually just leave then and say that we can't do it, it may be a week later or two weeks later you actually come back to that, see the point that you reached as it is there and try and take it a little bit further forward from that. I tend to listen to what the children are actually producing and whether they are actually listening to themselves certainly on intonation erm ..... playing together, lots of times you have to actually take when you're rehearsing a piece of music you have to take things out of the piece of music and do a separate exercise to actually put that back into the piece of music in the right place, so all playing together actually comes more closer.

13. G.C. What is it they hit up against you know you were saying you pushed them so far and they couldn't go any further?

14. Mr L. To get ..... I think as youngsters its having, its getting used to hearing other people, playing with other people, they are developing all the time, and that's why I'll say there are certain things that you let go a the beginning of a term lets say, that by the end of the term you don't let go and they know, you know you don't have to let go because they can feel it themselves but they aren't too sure what's wrong, if you ask them, I mean a lot of the things I tend to do is asking them what they think they can actually do so I find it .....

15. G.C. Okay, you're talking about how far you push children and how far you know where the line is, what about using technical language? How much technical language do you use, and how do you introduce them to that technical language?

16. Mr L. Right, ... in the group you will always find that some children have that technical language and the understanding of technical language, some children don't, the first thing you've got to do, and its for the children as well as for the person who is stood in front there is always a learning curve to find the level of the majority, cos I always find that you can ask if the children understand, if I happen to say something, it can be just thrown in and I don't really check whether they do know, but its always in the back of my mind that you're going to come back to that because then when you do ask if they do understand it I always like to get somebody to actually explain that because the number of children who will say I do understand what fortissimo means or meno mosso means..... right but I'm sure there's somebody in the group who doesn't, so I tend to get the children to help themselves almost, one of the tricks I've tended to use quite a lot is, having asked the children a certain thing, if they don't know rather than tell them is to actually get them to bring back to the next rehearsal the proper meaning, with an example and how they found that example, maybe in something that we've done in the past but that you, .. if we've just started a piece of music or a piece of music that they've done in the past, find

a technical term or something that may not have understood at the time but they've gone away, and actually researched it almost, because it gives them something to do in between the rehearsals. And that's the way I've tended to do it. Starting off by throwing things into a rehearsal, a technical term that I don't check, but knowing that I'm going to come back to it at some point, because some children will always ask, they'll ask anyway and at that point, it's a ideal opportunity to actually stop the rehearsal almost and just have a discussion because I think that's important with children, you know having that bit of discussion.

17. G.C. Having introduced a term would you then make a mental note and try and use it every time that you came across ... so if you introduced fortissimo, you know would you try and say that instead of loud every time.

18. Mr L. Yes, I think once... maybe not the first time, but once.. when you've had that discussion with the children and you know the children in the group are all aware of the meaning and understand that then you know you can start using that ..... but you've got to be aware that there are new children who may come into the group, occasionally half way through the term and I've had occasions where I have said something and had blank looks from them... just one or two people and that's been a case of ..you know revisiting that, recapping the meaning... I don't have to say anything, the other children just.....so whilst you're being aware of that you've got to remember you are using it all the time, but somebody might have come in half way through the term who may not know the meaning or understanding.

19. G.C. OK, can we go on to talk about the second main area that I wanted to talk about today, and that's the amount of peripherally within ensemble, there are people that are sort of on the edges of the ensemble, have just arrived and they're new and those that have been there a long while and they're well established and they're the people in the ensemble that's the sort of model I put to you, is that something you recognise?

20. Mr L. Yeah, I mean very much so, we've already talked about the way children certainly in the senior group in Beckley can be playing a third part in the senior group and a first part in the ..... when.... It gives them an incentive they get into a group and they maybe playing third trumpet part or third clarinet part or second trombone but it gives them something to aspire to, they're in that group... I've always said to children, even in the senior ensembles to some extent because you still get quite a few younger children. It doesn't matter if they sit there and only play one note, if they know where they are in the whatever music we're playing and they can ..... because the next week they may play a lot more notes. It takes the edge of having to come in and saying I've now moved up into

a senior group and I've got to be as the principal trumpet or the first clarinet playing, because children do worry about things like that.

21. G.C. How do you think they move forward as it were, to become the principal trumpet or whatever?

22. Mr L. Right ..... well to answer that its probably, you're thinking about when I was younger because I did exactly the same, starting off on third cornet in a brass band, the children start off, so I've been there you see the children as they get into the rehearsals, they grow in confidence, they will play a little bit louder, because they tend to... its very easy to let them hide, as long as you are aware as a conductor that they can only hid for so long, but then you expect... and they do tend to do that themselves anyway, they will come out... its almost like coming out of their shells and there's a growing confidence, they're fitting in with the band more. Having said that you've got to remember that there are some children who will always, you're always going to have third clarinet players, you're going to have some children who get a lot out of playing music who may never reach the standard to play first trumpet or first clarinet, but they're getting just as much out of that... in some ways its knowing not to push, because if you push them too hard to actually move up, saying you've been playing in this group now for two years, you ought to be on first clarinet, you can actually turn them off. So I've got to judge...and you can usually tell by the way the children are taking part, the children you can see are sorting just getting used to the ensemble and then as they get into it, you can tell they're improving and want to move up, some children aren't going to be able to improve, unfortunately but are still worthwhile as clarinet players or.... And so they aren't in the peripheries anymore because they are holding a seat down, in that position but there again the standard that they reach is never going to allow them to move up .... Sometimes they know that but they're quite happy performing it to the level that they can perform at, which is to the best of their ability and they're still taking part and being a worthwhile member of the ensemble.

23. G.C. So what are the skills they learn or develop as they move through these ensembles, because even if a child doesn't go from sort of peripheral to central...., they have come up through all these different levels haven't they .... So what are the particular skills they are either learning or developing ... I don't know which you see it as being?

24. Mr L. I mean, It's the whole art of playing, whether it be ensemble playing, intonation that has got to be developing all the time, because as the group is developing, those skills actually develop along with them and what's nice to see are the children who have been maybe on the third part a long time being sat next to somebody who may have just been moved up, who you can tell is

probably going, eventually to be a first clarinet or first trumpet player or move right up the band but they're actually gaining just by being sat next to that person that's got the experience knowing that they can play loud, being a third trumpet part, because usually the ensemble that they've come up from below, they haven't had the same... volume shall we say from the group below, the same intonation skills which they do develop as we've said, when they're getting...you aren't actually going.... You played that note, they play an F natural instead of an F sharp, or an F sharp or a D that's very sharp, when they're first starting in the group, I wouldn't mention that. Once they've grown into the group and gained in confidence then that sort of thing is actually pointed out to them. Once it's been pointed out to them, you know they're improving because it doesn't have to be pointed out to them every time you can see them knowing, looking, feeling themselves that your tuning actually is wrong and they can put it right themselves. The sign of a good player in the ensemble is that they start and do things that they've been shown, they start and do them themselves, they aren't having to be told every single time, of course you're always going to have to reiterate things but I know myself when you've done things with a group and then six or seven weeks down ... you may do ...things.... the same standard etc. with the same sort of things in and the children will tend to pick up.... they revert back to the experiences that they've had before, that's all helping with the level of attainment that the children reach.

25. G.C. So how much is aural awareness a part of that?

26. Mr L. I think a great deal eventually, like I say, when the children first start in a group well the aural awareness is, well this is a lot louder than it used to be and as they settle into that... so they're actually able to hide behind everybody else it comes into it that they have ... even though they have a part to play themselves, they're able to listen and be part of that group which is good.. which is a lot better and in some ways so much more interesting than them sat at home playing them by themselves. They've got themselves to hear, they haven't got the rest of an ensemble. So the larger ensemble eventually just develops them aurally, in a lot of cases without them realising it.

27. G.C. So you talk about their experience growing and aural awareness growing, have you any thoughts as to how that actually happens?

28. Mr L. Right, yeah they way that children develop, obviously in the first few weeks of being in the group, they do tend to hide its all new to them, as they progress, that is the number of weeks they are there, learning takes place without them realising as I said there's so many aspects of playing in ensemble that's a learning experience Having help from... just sat next to somebody who may be a better playing than them, who may know the music, know when to come in,

know how to count a little bit better than they've been taught in the past, maybe having another tutor in the group who can actually just prompt them a little bit, so it's a constant learning experience, whether it be from the way the music is actually put to them, because it is a harder group, the way that the group learn altogether by the way the conductor actually takes it, and you're developing, we've talked about the language that's used, all these things are constantly sent into them, and they're actually put into them and they're actually learning without realising it. So I think it's an ongoing process, it starts the very first time they pick the instrument up or the first ensemble that they played with. Of course the learning that they did then was just as important as it was .... it's a progression, as they progress through the ensembles they're all actually progressing together as so once they get into the senior group, that learning still takes place but .... I think that some of the children don't tend to know that they're actually learning anything .....because you say what have you learnt, why is this playing better? Some of them won't actually understand what it is about it... so it's the job of the conductor to actually bring that out of them so they actually understand what, if they are learning. I like to get children up to actually listen to the rest of the ensemble.

29. G.C. Yes I noticed that in one of the rehearsals I was observing

30. Mr L. Did you? To actually hear the ensemble, to hear themselves what's wrong, what can be put right, that's all a learning experience for them, because doing that when they're actually sat back in the ensemble they're actually listening more, they can listen more to what other people, and of course they're learning because they're actually listening out for what is right or what is wrong, and they can hear it more. So it's focussing them as well which is obviously a learning experience for them.

31. G.C. Right thank you very much indeed for your time again.

32. Mr L. Thank you.

APPENDIX 2

Example Observation Notes

Three example observation notes are included here, a transcript of one observation of each of the three ensembles which formed this study. The observation notes have been placed in chronological order and the names of the rehearsal participants have been changed.

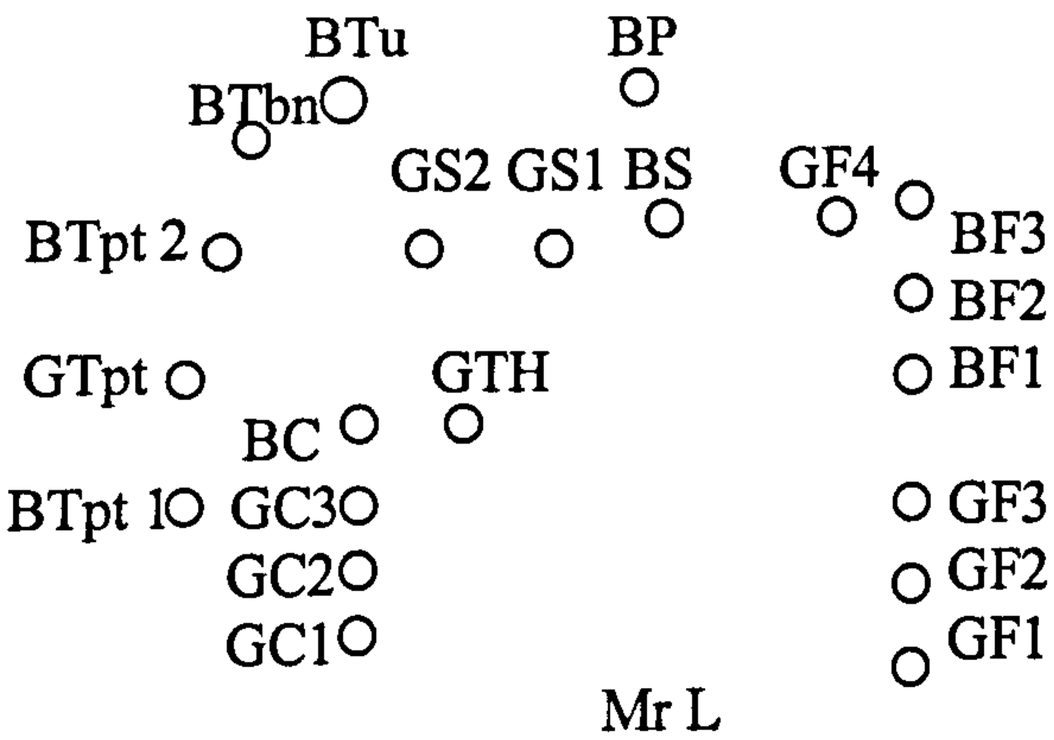
Senior Concert Band

Rehearsal held at 'Beckley' College

24th January 2001 - 7.00 – 8.00pm

Band Director – 'Mr Lovell'

Seating plan:



Key: GF = Girl/flute
BF = Boy/flute
BS = Boy/saxophone
GS = Girl/saxophone
GC = Girl/clarinet
BC = Boy/clarinet
GTH = Girl/tenor horn
BTpt = Boy/trumpet
GTpt = Girl/trumpet
BTbn = Boy/trombone
BP = Boy/percussion

The rehearsal was held in the main hall of a college building. While the hall was not large it took the band comfortably. The hall was well lit and had a good rehearsal acoustic.

1. Mr L speaking to whole band *'let's start with..... let's do a little bit of this Sinatra in Concert that'll get us started'.*

2. The band begins to play, after the first 8 bars have been completed Mr L stops them.

3. Mr L to saxophone section *'yes, can you put that* (cue) *in'.*

4. The band commences playing from the beginning again. Mr L sings difficult rhythms to various sections of the band as they arise and occasionally calls out the time.

5. About a quarter of the way through the piece Mr L stops the band.

6. Speaking to whole ensemble *'right, leave it there. Elergy'.*

7. Mr L to whole band *'right this* (Elergy) *is one of the hardest things you are going to play. No fast notes, no hard notes, simple, but you'll find it's the simple things that will jump up and bite you. It needs to be smooth'.*

8. The band commences playing from the beginning of the piece.

9. Mr L stops them at rehearsal mark 2.

10. Mr L to whole band *'the first thing we can improve in this is starting together, and breathing together'*.

11. They start from the beginning again.

12. Mr L prompts them while they play *'breath', 'hold it', 'together'*.

13. Mr L stops them at rehearsal mark 2 again.

14. Mr L begins to tune the flute section of the band.

15. Mr L to Girl/Flute 2 (GF2) *'don't let the note die away at the end its moving the tuning'*.

16. Mr L sings a note which decrescendos, he exaggerates a flattening of pitch as the sound dies away.

17. Mr L to Boy/Flute 2 (BF2) *'you are slightly flat up the octave, only push it slightly* (the air column) *but keep the corners of your embouchure'*. He demonstrates a down turn of the corners of the mouth.

18. Mr L to whole ensemble *'right, now, just Bass and Saxes'*.

19. The tuba and saxophone sections commence playing from the beginning.

20. As they play Mr L explains how he wants the playing improved *'you've got to listen to each other and be together'*.

21. After 8 bars Mr L stops them.

22. Mr L to whole ensemble *'right, everyone from the beginning'*.

23. The whole band plays with Mr L singing, and speaking directions over their playing.

24. Mr L stops them at rehearsal mark 2.

25. Mr L to the saxophone section *'right saxes'*.

26. Mr L tunes each member of the saxophone section individually.

27. Mr L to whole band *'when you are playing listen to your tuning and make small adjustments, you'll find that while you're playing the tuning will move'*.

28. Mr L to whole band *'this is one'* (referring to the down beat) he starts conducting and the band commences playing at rehearsal mark 1.

29. Again speaking directions and singing over the top of the music.

30. He points to Girl/Saxophone 2 (GS2) *'listen'*.

31. After 8 bars Mr L stops the band.

32. Mr L to whole ensemble *'now, dynamics, this isn't a march we want a round piano* (soft) *sound and on the crescendo, just warm the sound'*.

33. Mr L to all *'number one'*.

34. Mr L commences conducting the band starts playing from rehearsal mark 1, Mr L singing and prompting over the music.

35. Mr L stops them at rehearsal mark 2.

36. Mr L to all *'have we nobody that can play this, no?'*

37. Mr L to all *'figure 2'*

38. They commence playing at figure 2.

39. Mr L stops them after 8 bars.

40. Mr L to all *'we've got to shape it, 2 again'*.

41. The band commences playing at rehearsal mark 2.

42. Mr L stops them again after 8 bars.

43. Mr L to all *'from the third bar'*

44. The band commences playing from the 3rd bar of rehearsal mark 2.

45. He stops in the same place again.

46. Mr L to saxophone section *'can I have Saxes, D#, both play your D#?*

47. Girl/Alto Saxophone 1 (GS1) and Girl/Alto Saxophone 2 (GS2) play their D# and immediately realize they are out of tune with each other and bring the tuning of the 2 notes together.

48. Mr L to all *'everyone from the third bar'*.

49. Mr L in the direction of centre of the band *'and leave that out Denise'*.

50. The band commences playing from the 3rd bar after rehearsal mark 2.

51. Mr L calls out the pulse as they play.

52. After 16 bars Mr L calls out *'wait just a minute'*.

53. The band stops playing.

54. Mr L to all *'right on three, with the pick-up'*.

55. The band commences playing one beat before rehearsal mark 3, with Mr L calling the beat and sometimes singing.

56. He stops the band at rehearsal mark 4.

57. Mr L to all *'that was quite nice, very nice in fact'*.

58. Mr L to all *'from four'*.

59. Mr L to flute section *'who's doing it?'*

60. Girl/Flute 1 (GF1) and Girl/Flute 3 (GF3) point to GF2.

61. Mr L to all *'and breathing, we've stopped doing it because I haven't mentioned it for a while'*.

62. The band commences playing from rehearsal mark 4.

63. They stop and the end of the piece.

64. Mr L to flute section *'that f natural there is so important'*. He points to a place on their sheet music.

65. Mr L to all *'just give me the last two bars'*.

66. The whole band plays the last two bars.

67. Mr L *'well done Steve, well done clarinets'*.

68. Mr L to flute section *'we need to think where to breath, breath there'*, he points to a place on the flute part *'then die away to nothing'*.

69. Mr L to all *'last two bars'*.

70. The band plays the last to bars.

71. Mr L to all *'right keep that in your pad, it's hard, and when I say something to* (for example) *the flutes it will probably apply to you 2 bars later, so listen'*.

72. Mr L to all *'OK, Phantom of the Opera'*.

73. Mr L to all *'start at bar seven'*.

74. The musicians look for and arrange their music on the music stands.

75. Mr L to all *'right on seven then'*.

76. The band commences playing with Mr L prompting as they play *'crescendo'*, *'listen'*.

77. Mr L stops them at rehearsal mark A.

78. Mr L to all *'right, try that again, remember the rhythm'* he sings the repeated rhythmic pattern.

79. Mr L to all *'from seven'*.

80. The band commences playing at the seventh bar from the beginning, Mr L prompting and singing over the music *'lengthen now'*, *'together'*, *and 'not too slow'*.

81. After about 30 bars Mr L stops the band.

82. Mr L to all *'at that point last week what did I say would happen'?*

83. Boy/Flute 1 (BF1) to Mr L *'it would slow down'*.

84. Mr L to BF1 *'yes'*.

85. Mr L to all *'three bars before forty'*.

86. The band commences playing Mr L again prompting and singing as they play.

87. After about 12 bars Mr L stops them.

88. Mr L to all *'hold on when you come in at bar forty-eight trumpets you are too loud, the only people who are forte are the flutes'*.

89. Mr L to clarinets *'clarinets you are piano'*.

90. Mr L to Boy/Percussion (BP) *'can I hear that drum part again, I need more bass drum and more accent'*.

91. BP plays the required section on his own.

92. Mr L to all *'right, everyone on forty'*.

93. The band commences playing at bar 40, Mr L prompting, singing and counting to assist entries.

94. After about 24 bars Mr L stops the band.

95. Mr L to all *'yeah, when my arms are getting slower you're not slowing down much, from fifty-six'*.

96. The band commences playing at bar 56.

97. After a passage of about 12 bars Mr L stops the band.

98. Mr L to saxophone section *'that bit, remember we are slowing down so every note wants to be a bit longer, each quaver slightly longer than the last'*.

99. Mr L to all *'three bars again'*.

100. The band commences playing.

101. After about 8 bars the music stops unexpectedly.

102. Mr L looks at the boy playing trombone (BTbn).

103. TJ to BTbn *'Ben, have a go'*.

104. BTbn to Mr L *'what does it go like'?*

105. Mr L sings the melody.

106. BTbn plays his solo passage. The band rejoin in the correct place after the trombone solo and they play into the next section with the usual prompting and singing from Mr L.

107. At the end of a silence created by a silent pause Mr L shouts *'go'* and gives a decisive and firm down beat.

108. A loud and vigorous section of music begins, Mr L continues to prompt and sing exposed parts to give reassurance.

109. After about another 30 bars Mr L stops conducting and says *'right stop there'*.

110. Mr L to flutes *'flutes that wonderful double forte starts well and then just dies away, why not stagger each other'?*

111. Mr L to all *'you can't breathe between one ten and one eleven'*.

112. Laughter.

113. They commence playing from after the silent pause again.

114. Mr L stops them after they have gone through the passage he had been unhappy with.

115. Mr L to all *'well done'*.

116. Mr L restarts the band from the point in the music where had stopped them.

117. Mr L stops them after they have completed a further 24 bars.

118. Mr L to all *'from* (bar) *131, lots of breath, lots of sound'*.

119. Mr L to the flute section *'he* (the arranger) *has purposely given you a rest there so you can play forte there'*.

120. Boy/Tuba (BTu) to Mr L *'at one three five, I can't get that to work'*.

121. Mr L to BTu *'you're* (playing it) *exactly right'*.

122. Mr L to BP *'Josh you've got the same rhythm, can I hear it'?*

123. BP plays the section from bar 131.

124. Mr L to BP '(it is) *a good idea to number the repeated* (bis) *bars'.*

125. Mr L to all *'everyone, one three one'.*

126. The band commences playing at bar 131.

127. Mr L stops them after about 16 bars.

128. Mr L to trumpet section *'thank you trumpets, A flats'.*

129. The trumpets play the passage with the A flats on their own.

130. When the trumpets have completed the passage Mr L says *'and tenuto on those notes before you come in forte'.*

131. Mr L to all *'everyone, one three one'.*

132. The band plays to the end of that section of music and Mr L stops them.

133. Mr L to all *'very good we're starting to think about where we come in, how it all fits together'.*

134. Mr L to all *'right quickly, Trumpeters Lullaby'.*

135. The musicians sort their music.

136. Mr L to all *'remember I take in four to begin with'.*

137. The band commences playing from the beginning.

138. After 2 bars Mr L stops them.

139. Mr L to GS1 *'remember you've got to transpose that'.*

140. Mr L explains the transposition to GS1.

141. They commence playing from the beginning again.

142. As tranquil opening passage opens up into a brighter section Mr L calls out *'move it'* and later in the same brighter section *'push'*.

143. At the end of a short trumpet cadenza played by Boy/Trumpet 1 (BTpt1) Mr L holds up his hand palm out to indicate to the band that they are not continuing.

144. Mr L to BTpt 1 *'you did that the wrong way round'*.

145. Mr L sings the cadenza the way he wants it played.

146. BTpt1 plays the cadenza again the way Mr L had sung it as it comes to an end Mr L holds his baton up to indicate to the band that he is continuing this time.

147. The band continues to the end of the piece with Mr L prompting and singing. To saxophone section *'listen to what's going on'*.

148. At the end of the piece Mr L to all *'yes, together there at the end'*.

149. They play the last 4 bars again.

150. Mr L to all *'thank you, see you again next week'*.

151. The musicians begin packing the instruments and music away.

Intermediate Harmonium Group

8th May 2001 – 6.00 – 7.00pm

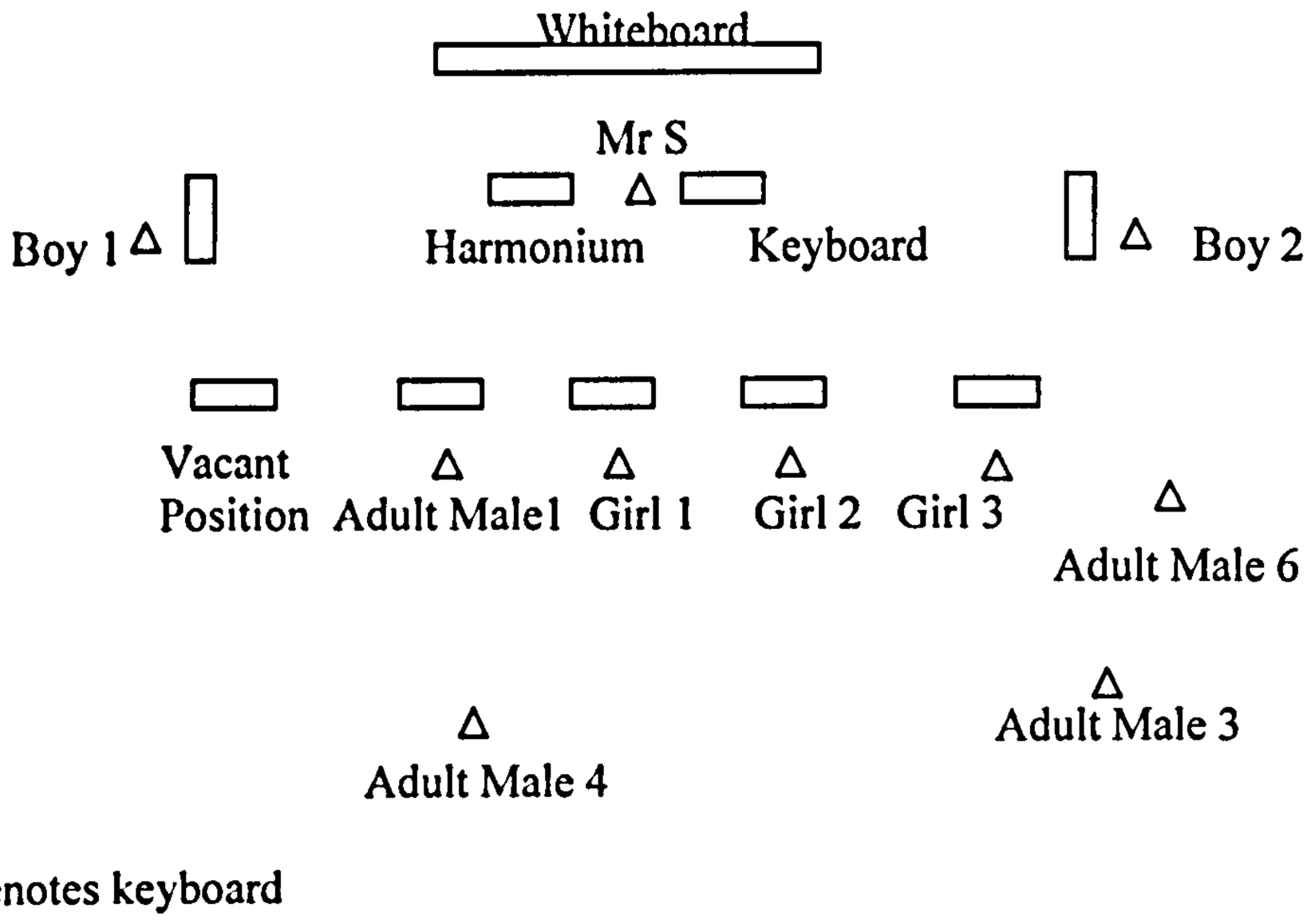
Group Leader 'Mr Singh'

The Harmonium group runs from 5.00 – 8.00pm as a 'rolling' rehearsal. The younger less experienced players come for the first hour and the more advanced for the second or

third hour. Some students stay for more than one hour. Upon the researcher's arrival a group consisting of 6 students, 5 of school age and one adult.

The rehearsal takes place in a well light large music teaching room in the local College of Further Education.

Seating plan:



▭ Denotes keyboard

1. The group members are learning a new melody based on the Bhairavi scale.

2. Mr S teaches segments of the melody individually to each student by singing a segment that the student then plays back.

3. These segments are then joined together to produce a longer section of music.

4. Mr S to Boy 2 (B2) *'try and play it like this'*. Mr S demonstrates a segment of the melody with an ornament on preceding the final note.

5. B2 makes an attempt.

6. Mr S to B2 *'no like this'*. Mr S demonstrates again.

7. This happens 6 or 7 times until Mr S is happy with the result.

8. When a sufficient amount of the melody has been learnt by all the students they play that section altogether with along with Mr S .

9. (6.05pm) Girl 1 and Girl 2 get up to leave.

10. Mr S *'see you next week, and I know you wrote some of it down'*.

11. Girls leave without reply.

12. Mr S demonstrates another embellishment to the remaining students.

13. Mr S to all *'listen to this it makes the tune more better'*

14. B1 stands up to get a view of Mr S fingers as he demonstrates the new ornament on his harmonium once more.

15. Mr S goes from student to student, starting with Boy 2, (B2) demonstrating the ornament on each student's keyboard and getting them to copy.

16. When demonstrating the new ornament to Adult Male 1 (AM1) Mr S switches between Pakistani and English, even mid-sentence.

17. B1 is unable to copy the new embellishment exactly.

18. Mr S *'are you nervous boy'*.

19. B1 half smiles, rubs his forehead and shakes his head.

20. When the new melody with embellishments is sufficiently memorized all the students play it together.

21. Mr S provides supporting chords and rhythm via his electronic keyboard.

22. During the 'play-through' B2 watches Mr S's fingers very carefully.

23. (6.15pm) Girl 4 (G4) enters the room takes the seat formally used by Girl 2.

24. Mr S to G4 *'hello there'*.

25. G4 to Mr S *'hello'*.

26. Mr S to G4 *'is your mother coming tonight?'*

27. G4 to Mr S *'I don't know where she is, she should be coming'*.

28. Mr S explains to G4 that the group is learning a new tune and begins to show her the notes of the melody by pointing to the appropriate notes, on a diagram of a keyboard draw on the whiteboard, as he sings them.

29. G4 plays each segment back.

30. Each time G4 plays a segment back correctly Mr S ask her to play it together with its preceding segment then from the beginning of the melody up to, and including, the new segment.

31. In the middle section of the melody the segments are only one bar in length and G4 copies each in time as an echo.

32. The rest of the group remains silent and still throughout the time taken to make G4 familiar with the new melody.

33. (6.20pm) Three more people enter the room, a mother with two children, Girl 5 (G5) and Boy 3 (B3).

34. G5 and B3 are attending for the first time.

35. Mr S invites then to sit down.

36. They sit together at the vacant keyboard between B1 and AM1.

37. Mr S asks G5 and B3 if they play the keyboard.

38. They nod, while indicating with their hands that they only play a little.

39. Mr S demonstrates a simple 3 note pattern on the keyboard in front of G5 and B3.

40. He invites G5 to copy.

41. She does this successfully.

42. He then repeats this process with another short pattern, which she successfully repeats.

43. He then plays the two segments segue and asks G5 to copy.

44. This she does successfully.

45. He repeats this pattern with B3.

46. After spending about 5 minutes with the new comers Mr S asks the whole group (excluding the new comers) to play the new melody together. The melody is about 2 min 30 seconds in length.

47. During this *'run-through'* a second adult male (AM2) enters the room and sits down next to B1 without a keyboard. *(see note 1).*

48. Mr S asks G4 if she would be able to play the whole melody solo.

49. G$ to Mr S *'I'll have a go'*.

50. She successfully completes the new melody assisted be a couple of prompts from Mr S.

51. Mr S *'very good, you have done it, nobody remembers a tune that quickly'*.

52. Towards the end of G4's solo performance another adult male (AM3) has entered the room carrying a guitar case.

53. Mr S and AM3 greet each other.

54. Mr S asks AM3 if he will sing a song to the group.

55. AM3 to Mr S *'give me a second my hands are cold, the strings will cut through them'*.

56. AM3 gets his guitar out and begins to tune it.

57. Mr S to whole group *'while we are waiting let's play it all together again'*.

58. At the end of the run-through Mr S asks B2 to play a different tune.

59. B2 to Mr S *'I can't remember one'*

60. B1 and AM1 offer suggestions as to what tunes he could play.

61. B2 plays the first two stanzas of a melody before Mr S stops him.

62. Mr S asks G3 if she can copy what B2 has just played.

63. She does this successfully, as in turn do the other members of the group.

64. Mr S returns his attention to B2 and asks him to repeat what he (Mr S) sings.

65. Mr S sings some improvised segments articulating the appropriate Pakistani note name to each pitch *(see note 2)*.

66. G4, G3 and AM1 repeat this exercise, in turn.

67. The same exercise is commenced with boy 1.

68. Mr S explains to the whole group that during the improvised session with B2 and B1 the segments had been based on a different scale to that that they had been using for most of the evening.

69. Mr S points to the notes used in the new scale on the keyboard draw on the whiteboard.

70. Mr S switches from singing to improvising segments on his keyboard.

71. B1 continues to repeat each segment on his keyboard.

72. Mr S plays a new and different scale on his keyboard and asks Boy 1 to play a melody they had learnt recently based on this scale.

73. B1 commences playing but breaks down after a few notes.

74. Mr S turns his attention to G4 and asks her to the notes of the melody attempted by B1 as he (Mr S) points to the appropriate notes on the keyboard draw on the whiteboard.

75. Mr S then repeats the same exercise with B2 followed by B1 and then by AM1.

76. G3 is asked to play the same melody as B2, B1 and AM1 but Mr S does not point to the keys on the whiteboard this time.

77. G3 completes this task successfully.

78. Each member of the group is asked in turn to play the introduction of the new melody they had learnt tonight.

79. They all succeed in this task.

80. Mr S asks B2 to copy what he plays *(see note 3)*.

81. Each student, in turn, copies what Mr S plays on his keyboard.

82. Mr S asks AM3 if he is ready to sing to the group.

83. AM3 commences his song accompanying himself on the guitar.

84. After a few phrases Mr S joins in on the harmonium.

85. During the performance of the song another adult male (AM4) enters the room.

86. AM4 walks to the back of the room and leans back against a table *(see note 4)*.

87. A few moments later another adult male (AM5) enters the room.

88. AM5 shakes hands with B2 and moves across to stand behind Mr S.

89. AM5 whispers something to which Mr S nods his head while continuing to play.

90. AM5 leaves the room.

91. A few moments later another adult male (AM6) enters the room and leans against a table at the side of the room.

92. AM3 ends his song to applause from the whole room.

93. AM4 asks Mr S if it is ok to take his son (B1) home now.

94. Some members of the group get up to leave others stay to continue in the next session.

Note 1. This latter turned out to be a parent arriving early to collect the child.

Note 2. Mr S calls this exercise 'listen and play'. Each segment consists of 6-10 different pitches.

Note 3. Mr S plays the opening phrase of the 'new melody' replacing note values with repeated quavers. The melody is in compound time using mainly whole note values (dotted crotchets and dotted minims). Therefore, dotted crotchets where replaces by 3 repeated quavers and dotted minims were replaced by 6 repeated quavers.

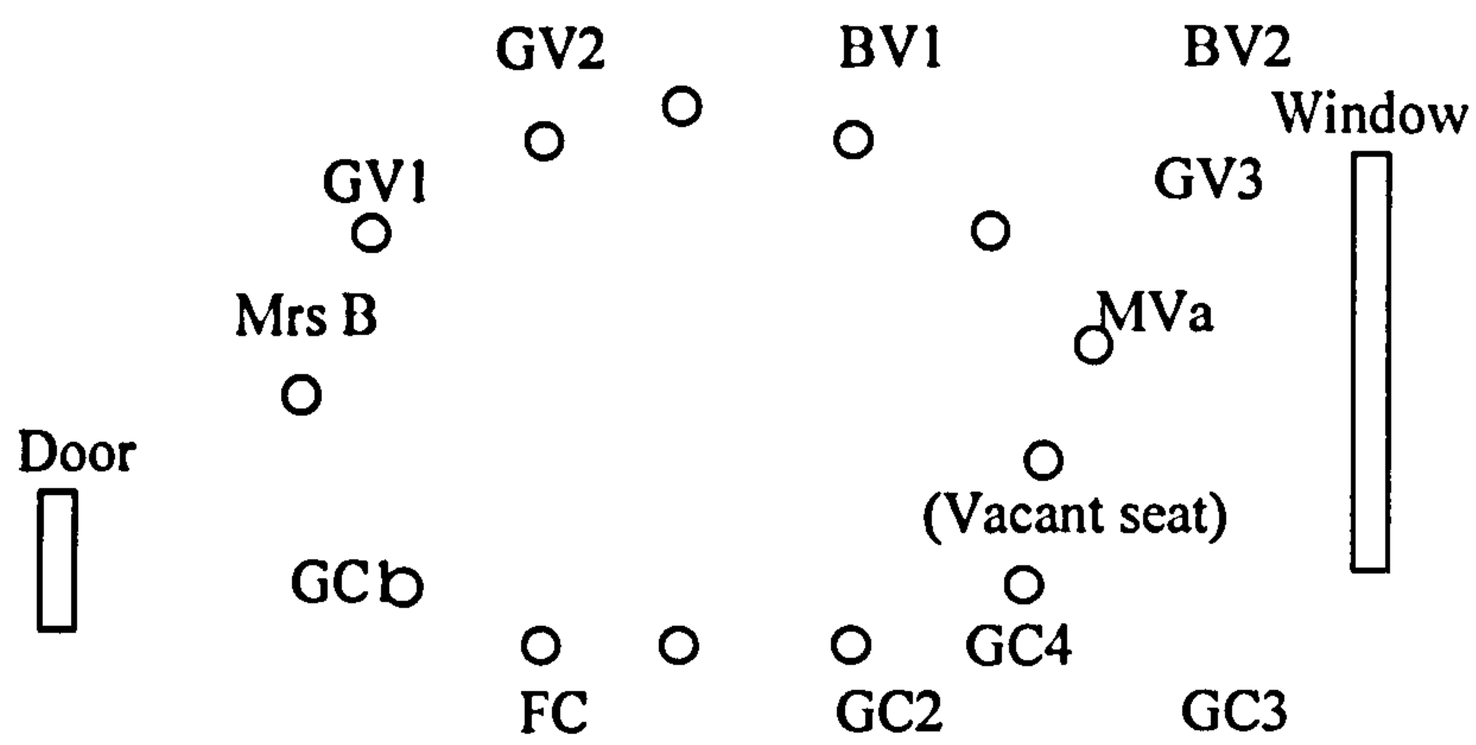
Note 4. AM4 was a parent collecting a member of the group.

Junior String Orchestra

25th September 2001

Conducted by 'Mrs Barlow'

Seating plan:



Key GV = Girl Violin
BV = Boy Violin
FC = Adult Female Cello
MVa = Adult Male Viola

The rehearsal takes place in a small business studies teaching room in the local secondary school. The room is adequately lit but a little congested. Desks and chairs have been pushed to the sides of the room to create a space in the centre of the room where the orchestras' chairs and music stands have been placed.

1 Mrs B commences the rehearsal 'D major scale'.

2 Mrs B demonstrates a D major scale that returns to the tonic every other note.

3 The whole ensemble plays this version of the scale with Mrs B calling out some note names as prompts.

4 Mrs B to all *'lets do it again, faster'*.

5 Girl Cello 2 (GC2) to Mrs B *'starting on E?'*

6 Mrs B to GC2 *'no starting on D'*, speaking to whole ensemble *'after four, 1 2 3 4'*.

7 Mrs B calls out some note names as prompts.

8 Mrs B to whole ensemble *'let's have a go at one piece we were playing last week, then I have some new things'*.

9 Mrs B gives the music out.

10 Girl Cello 4 (GC4) looking at the book she has been given speaks generally (to whole group) *'its on page 11'*.

11 Mrs B speaking to whole ensemble *'what note are we starting on'*?

12 A number of ensemble members call out the correct answer.

13 Mrs B to whole ensemble *'What key are we in'*?

14 A number of ensemble members call out the correct answer.

15 Mrs B to whole ensemble *'how do we know we are in D'?*

16 Several members of the ensemble contribute to the answer by adding to, or clarifying the statement of the previous speaker.

17 Mrs B to whole ensemble *'let's have a go through. 3 fingers 'cellos, 2 fingers violins'*

18 Mrs B to the violin section *'its different fingering for the cellos'*.

19 The ensemble plays 3 blind mice in unison octaves.

20 During playing Adult Female (AF) stops playing and calls out the time for Girl Cello 1 (GC1).

21 After a complete run through Mrs B rehearses the piece by demonstrating short (2-4 bars) segments and asking the group to play each after her.

22 Mrs B speaking to Boy Violin 1 (BV1) *'from the open 'A' David.*

23 GV2 points with her bow to the point in the music that the ensemble is starting.

24 Mrs B continues to take short segments, demonstrating each on her cello before the whole ensemble play it together.

25 When each segment has been rehearsed separately the whole piece is played through.

26 When the ensemble has completed the run through Mrs B suggests that they play it as a round.

27 Mrs B to whole ensemble *'who wants to start first'.*

28 GC4 '(can) *we go first? The violins went first last time'.*

29 They play it as a round, cellos leading.

30 Mrs B to whole ensemble on completion of the round *'a bit of a mess wasn't it'?*

31 Mrs B points out where the mistakes were made.

32 Mrs B to whole ensemble *'can anyone remember what 6/8 means'*?

33 GC1 *'does it mean count each note 6 times?'*

34 Mrs B explains the meaning of 6/8 to the whole ensemble.

35 GV1 to Mrs B *'ah beats I didn't know what quavers were'.*

36 Mrs B further clarifies the meaning of 6/8.

37 The whole ensemble plays the round again, violins leading off.

38 On completion of the round CG4 speaking generally (to anyone listening) *'I didn't like that'.*

39 Mrs B to whole ensemble *'I didn't like that much either, we weren't together. Let's try it again violins leading'.*

40 Mrs B stops them at the half way point as the two sections are getting out of time with each other.

41 Mrs B restarts them at the point she had just stopped them playing along on her cello and exaggerating the strong beats to help them stay together.

42 Mrs B stops them after 16 bars and explains further why the two parts of the round are not staying in time with each other.

43 They play it again.

44 GC2 speaking generally *'we did it!'*

45 Mrs B gets some new music out of a box on the table behind her.

46 This new score has parts for Violin 1, Violin 2, Viola, Cello 1 and Cello 2 and piano (though there is no piano in the room).

47 Mrs B organizes them showing how two large sheet music parts can share the same music stand if folded carefully.

48 Mrs B tells the ensemble that they will commence playing the new piece (Skip to My Lou) at rehearsal mark 'A'.

49 Mrs demonstrates the first few bars of the 1st Violin part on her cello.

50 Mrs B to whole ensemble *'before we start what key are we in?'*

51 GV3 to Mrs B *'G'*.

52 GC3 addresses Mrs B while pointing to a symbol on her sheet music. *'Miss what does that mean?'*

53 Mrs B to GV3 *'don't worry about that we'll come to that later'*.

54 They all commence playing at rehearsal mark 'A'.

55 When they have completed the first 8 bars Mrs B stops them.

56 She goes round the ensemble section by section asking each section what note they commence playing on at rehearsal mark 'A'.

57 Each section of the ensemble answers correctly.

58 The ensemble starts from rehearsal mark 'A' again.

59 Mrs B asks the 1st and 2nd violins to play from rehearsal mark 'A' without the others and she play along with them on her cello.

60 When they have completed the first section Mrs B asks then to play the last two notes again this time without her playing.

61 When they have played these two notes Mrs B verbally checks with each of them what note they should be playing.

62 Mrs B turns to face the cellos *'from 'A' then'*.

63 The cellos play from rehearsal mark 'A' to rehearsal mark 'B'.

64 Mrs B warns them not to lose tempo.

65 Mrs B asks GC2 and GC3 what fingering they should be using on the last note before rehearsal mark 'B'.

66 GC2 and GC3 are unsure of the correct fingering.

67 Mrs B reminds them.

68 The whole ensemble plays through rehearsal mark 'A' to rehearsal mark 'B'.

69 While they are playing Mrs B clicks a pulse with her fingers.

70 On completion Mrs B sings the last two bars before rehearsal mark 'B' to the 1st violins and tells them that these notes are *'quicker than the rest'*.

71 The whole ensemble plays the last two bars before rehearsal mark 'B'.

72 Mrs B to whole ensemble 'lets move to 'B' now'.

73 Mrs B draws the ensemble's attention to a new instruction on the sheet music (pizzicato). She explains what it means and spends several minutes demonstrating and allowing the ensemble members to have a go.

74 The ensemble commences playing from rehearsal mark 'B'.

75 Mrs B assists them as the markings return the players to the use of the bow two bars before rehearsal mark 'C' *'and back to normal.....'* Mrs B indicates the point in the music with her bow.

76 On completion of this section GV1 complains to Mrs B that she can't count the rests to make her entry at the correct time.

77 Mrs B tells her that if she can count up to two twice she can do it.

78 Some general discussion ensues, between Mrs B and ensemble members and between individual ensemble members, as to when the different parts join in this fragmented section of the piece.

79 They ensemble plays from rehearsal mark 'A' to rehearsal mark 'B' again.

80 Mrs B leads each group of instruments on her cello, as it is their turn to join in.

81 On completion of this segment they look at the next segment of the music, from rehearsal mark 'B' to rehearsal mark 'C'.

82 Mrs B speaks to whole ensemble *'now that word is col legno'*.

83 Mrs B turns to GC3 *'now col legno, you asked earlier'*.

84 Mrs B explains and demonstrates the difference between col legno and what she terms 'natural' bowing.

85 The ensemble members try out the technique of col legno playing.

86 Mrs B to whole ensemble *'right lets have a go a* (rehearsal mark) *C'*.

87 The ensemble play from rehearsal mark 'C' to rehearsal mark 'D'.

88 This section involves 2 bars bowed followed by 2 bars col legno, etc. over the 8 bar segment. The col legno playing gets better each time it reappears.

89 Mrs B to whole ensemble *'right, lets try from D. Violins you've got some fast notes'*.

90 Mrs B explains to each section in turn how their part fits with the rest in this segment.

91 As they play this section Mrs B plays cello and sings simultaneously to lead each section of the ensemble.

92 On completion Mrs B asks the ensemble what is meant by the term 'a tempo' several members of the ensemble call out the correct answer.

93 GV1 asks Mrs B what is meant by *'the half moon and star'* (a pause sign) three bars before the end of the piece.

94 Mrs B explains using her voice to demonstrate.

95 The ensemble plays from rehearsal mark 'D' to the end of the piece.

96 Mrs B to the whole ensemble *'right lets go all the way through'*.

97 *'I'll tell you what, lets count all the rests in between* (each segment) *we'll have to do it when we get the piano'*

98 Mrs B lays her cello down and conducts this run through giving regular verbal assists and prompts.

99 When giving verbal assists Mrs B uses simple English translations of the Italian terms that the ensemble encounter (i.e. col legno is called as 'tap, tap'), she also sings much of the melody line.

100 On completion of the run through Mrs B rehearses the last two bars with everyone except the 1st violins (as they have a different rhythmic pattern to the remainder of the ensemble).

101 Then the whole ensemble plays the last two bars together.

102 The 1st violins struggle to play their different rhythm against the rhythmic pattern being played by the remainder of the ensemble.

103 They do it again this time Mrs B plays along with the 1st violins part on her cello.

104 Mrs B to whole ensemble *'right, we just have a few minutes left let's do the Tallis Cannon'*.

105 Mrs B reminds the ensemble of the particular features of this piece - key, difficult passages etc.

106 The ensemble then runs it straight through.

107 On completion they play it again as a round, cellos leading.

108 Mrs B to whole ensemble *'OK I think we'll get Skip to My Lou off in time for the concert'.*

109 The ensemble members begin to pack away.

General Observations

Pupils asked questions freely when they needed clarification.

In the breaks between playing (while music was given out, when Mrs B spoke to other ensemble members etc.) the ensemble members interact a great deal, pointing at the sheet music, helping to make adjustments to each others instruments etc.

BIBLIOGRAPHY

Ausubel, D.P. (1968) *Educational Psychology A Cognitive View*, New York, Holt Rinehart and Winston Inc.

Ausubel, D.P. (1985) Learning as constructing meaning, in N.Entwhistle (ed) *New Directions in Educational Psychology: Learning and Teaching,* Lewes, Falmer Press

Bakhurst, D. (1988) Activity, consciousness, and communication. Philosophy Department Report. Oxford University, Oxford.

Barry, N.H. and McArthur, V. (1994) Teaching practice strategies in the music studio: a survey of applied music teachers. *Psychology of Music*, 22, 44-55.

Bartlett, S., Burton, D. and Peim, N. (2001) *Introduction to Education Studies,* London, Paul Chapman Publishing.

Biggs, J.B. and Moore, P.J. (1993) *Process of Learning,* 3rd edn, London, Prentice Hall.

Blumer, H. (1969) The methodological position of Symbolic Interactionism, in H.Blumer *Symbolic Interationism,* Englewood Cliffs, Prentice Hall.

Bronfenbrenner, U. (1979) *The Ecology of Human Development,* Cambridge, MA. Harvard University Press.

Bruner, J.S. (1966) *Towards a Psychology of Instruction,* Cambridge, MA. Harvard University Press.

Bunting, R. (1987) Composing music: Case studies in the teaching and learning process. *British Journal of Music Education,* 4, 25-52.

Burgess, R.G. (1982) *Field Research: A Sourcebook and Field Manual.* London, Allen and Unwin.

Burgess, R.B. (1984) *In the Field: An Introduction to Field Research*. London, Allen and Unwin.

Carpenter, R. (1988) A descriptive analysis of relationships between verbal behaviours of teacher-conductors and ratings of selected junior and senior high school band rehearsals. *Update,* 7, 37-40.

Carspecken, P.F. (1996) *Critical Ethnography in Educational Research: A Theroretical and Practical Guide*, Routledge, London.

Chaiklin, S. and Lave, J. (1996) *Understanding Practice: Perspectives on activity and context*, Cambridge, Cambridge University Press.

Cleave, S. and Dust, K. (1989) *A Sound Start: The schools' instrumental music service,* Windsor, NFER-Nelson.

Cohen, L. and Manion, L. (1994) *Research Methods in Education,* 4th edn. London, Routledge.

Comber, C., Hargreaves, D.J. and Colley, A. (1993) Girls, boys and technology in music education. *British Journal of Music Education,* 10, 123-34.

Cooksey, J.M. and Welch, G.F. (1998) Performance expectancy, success, satisfaction, and attributions as variables in band challenges. *Journal of Research in Music Education,* 15(1), 99-119.

Cooper, D.J. (1985) An Analysis of Group Instrumental Teaching. In *British Journal of Music Education*, 1,2, 19-38.

Coopers & Lybrand and Mori (1994) *Review of Instrumental Music Services,* London, Incorporated Society of Musicians.

Cox, J. (1986) Choral rehearsal time usage in a high school and a university: A comparative analysis. *Contributions to Music Education,* 13, 7-23.

Cox, J. (1989) Rehearsal organisational structures used by successful high school choral directors. *Journal of Research in Music Education,* 37, 201-218.

Davidson, J.W. (1999) Self and desire: A preliminary exploration of why students start and continue with music learning. *Research Studies in Music Learning*, 12, 30-37.

Davidson, J.W. and Smith, J.A. (1997) A case study of 'newer practices' in music education at conservatoire level. *British Journal of Music Education,* 14(3), 170-251.

Davies, C.A. (1999) *Reflexive Ethnography, A guide to researching selves and others*, London, Routledge.

Davis, B. and Sumara, D.J. (1997) Cognition, complexity and teacher education, *Harvard Educational Review, 67,* pp105-121.

Denscombe, M. (1998) *The Good Research Guide: For small-scale social research projects,* Buckingham, Open University Press.

Denzin, N.K. (1970) *The Research Act in Sociology,* London, Butterworths.

Denzin, N.K. (1989) *Interpretive Interactionism, Applied Social Research Methods Series Volume 16,* London, Sage.

Dowling, W.J. (1988) Tonal structure and children's early learning in music, in J.A. Sloboda (ed.) *Generative Processes in Music: The Psychology of Performance, Improvisation and Composition,* pp113-128. Oxford, Clarendon Press.

Durrant, C. (2000) Making Choral Rehearsals Seductive: Implications for Practice and Choral Education, *Research Studies in Music Education, 15,* 40-49.

Engeström, Y. (1987) *Learning by expanding: An activity-theoretical approach to developmental research,* Helsinki. Orienta-Konsultit Oy.

Engeström, Y. (1996) Developmental studies of work as a testbench of activity theory: The case of primary care medical practice, in S. Chaiklin and J. Lave (eds) *Understanding Practice: Perspectives on activity and context,* Cambridge: Cambridge University Press.

Fielding, N. (1993) 'Qualitative Interviewing' in N. Gilbert (ed) *Researching Social Life,* London, Sage Publications.

Fletcher, P. (1991) *Education and Music,* Oxford, Oxford University Press.

Finnegan, R. (1996) 'Using documents', in R. Sapsford and V. Jupp (eds.), *Data Collection and Analysis*. London, Sage, pp 138-151.

Gagne, R.M. (1985) *The Conditions of Learning and Theory of Instruction,* 3rd edn, New York, CBS College Publishing.

Geertz, C. (1973) Thick description: Toward and interpretive theory of culture, in C. Geertz, *The interpretation of cultures*, New York, Basic Books, pp 3-30.

Glaser, B. and Strauss, A. (1967) *The Discovery of Grounded Theory: Strategies for Qualitative Research,* Chicago, Aldine.

Green, L. (2001) *How Popular Musicians Learn: A way ahead for music education,* London, Ashgate Press.

Hallam, S. (1995) Professional musicians' approaches to the learning and interpretation of music. *Psychology of Music*, 23, 111-128.

Hallam, S. (1998) *Instrumental Teaching: A practical guide to better teaching and learning,* Oxford, Heinemann.

Hallam, S. and Lamont, A. (2001) Learners: Their Characteristics and Development, in *Mapping Music Education Research in the UK, BERA Music Education Review Group,* 9-25.

Hallam, S. and Prince, V. (2000) *Research Into Instrumental Music Services,* Nottingham, DfEE Publications, Research Report 229.

Hammersley, M. (1992) *What's Wrong with Ethnography?* London, Routledge.

Hammersley, M. and Atkinson, P. (1995) *Ethnography: Principles in Practice,* 2nd edn. London, Routledge.

Howard, D.M., Angus, J.A. and Welch, G.F. (1994) Singing pitch accuracy from years 3 to 6 in a primary school, *Proceedings*, Institute of Acoustics 1994 Autumn Conference, Windemere, 14-17 November 1994 , 16(5), 223-230.

Humphreys, J.T., May, W.V. and Nelson, D.J. (1992) Research on music ensembles. In R. Colwell (ed), *Handbook of research on Music Teaching and Learning: Music Educators National Conference,* New York: Schirmer Books.

Hutchins, E. (1996) 'Learning to navigate' in S. Chaiken and J. Lave (eds.) *Understanding Practise, Perspectives on Activity and Context*. Cambridge, Cambridge University Press, pp35-63.

Imberty, M. (1969) *L'acquisition des structures tonales chez l'enfant,* Paris, Klincksieck.

Johnson, P. (1997) Performance as experience the problem of assessment criteria. *British Journal of Music Education,* 14(3), 271-282.

Junker, B. (1960) *Field Work*, Chicago, University of Chicago Press.

Jupp, V. (1996) Documents and critical research, in R. Walker (ed) *Applied Qualitative Research*, Aldershot, Gower, pp 45-55.

Kemp, A.E. (1996) *The musical temperament: The psychology and personality of musicians,* Oxford, Oxford University Press.

Kemp, A.E. (1997) Individual differences in musical behaviour, in D.J. Hargreaves and A.C. North (eds.). *The social psychology of music,* Oxford, Oxford University Press.

Lamont, A. (1998) Music, Education, and the Development of Pitch Perception: The Role of Context, Age, and Musical Experience. *Psychology of Music,* 26, 7-25.

Lave, J. and Wenger, E. (1991) *Situated Learning: Legitimate peripheral participation,* Cambridge, Cambridge University Press.

Lecanuet, J-P. (1996) Prenatal auditory experience, in I. Deliège and J. Sloboda (eds.) *Musical Beginnings: Origins and Development of Musical Competence,* pp3-34, Oxford, Oxford University Press.

Leng, X. and Shaw, G.L. (1991) Towards a neutral theory of higher brain functions using music as a window, in *Concepts in Neuroscience* 2: 229-258.

Lofland, J. (1971) *Analysing Social settings,* Belmont, CA., Wadsworth.

Long, M. (2000) *The Psychology of Education,* RoutledgeFalmer, London.

Macdonald, K. and Tipton, C. (1993) Using Documents, in N. Gilbert (ed) *Researching Social Life*, London, Sage Publications.

Matthews, M.R. (2000) Appraising Constructivism in Science and Mathematics Education in D.C. Philips (ed) *Constructivism in Education: Opinions and Second opinions on Controversial Issues, Ninety-ninth Yearbook of the National Society for the Study of Education*, Chicago, Illinois. The University of Chicago Press.

McDermott, R.P. (1996) 'The acquisition of a child by a learning disability' in S. Chaiken and J. Lave (eds.) *Understanding Practise, Perspectives on Activity and Context*, Cambridge, Cambridge University Press, pp269-305.

McPherson, G.E. and Thompson, W.F. (1998) Assessing music performance: issues and influences. *Research Studies in Music Education*, 10, 12-24.

Manturana, H. (1991) Science and Daily Life: the Ontology of Scientific Explanations, in F Steier (ed) *Research and Reflexivity*, London, Sage Publications.

Mason, J. (1996) *Qualitative researching*, London, Sage Publications.

May, T. (1997) *Social Research: Issues, Methods and Process*, Buckingham, Open University Press.

Menchaca, L.A. (1988) A descriptive analysis of secondary instrumental conductor rehearsal problem-solving approaches, addressed musical elements and relationship to student attitude. Unpublished doctoral dissertation, Ohio State University, Columbus.

Miles, M.B. and Huberman, A.M. (1994) *Qualitative Data Analysis,* 2nd edn. Thousand Oaks CA, Sage Publications.

Murray, K.C. (1975) The effect of teacher approval/disapproval on musical performance, attentiveness, and attitude of high school choruses, in C.K. Madsen, R.D. Greer and C.H. Madsen (eds) *Research in music behaviour: Modifying music behaviour in the classroom* (pp 165-181), New York: Teachers College Press.

O'Neill, S.A. (1997) Gender and music. In D.J. Hargreaves and A.C. North (eds.) *The social psychology of music*, pp.46-63. Oxford, Oxford University Press.

Parlett, M. and Hamilton, D. (1976) Evaluation as Illumination: A New Approach to the Study of Innovative Programmes, in G. Glass (ed) *Evaluation Studies Review Annual, 1*, pp 140-157.

Pascoe, C.B. (1973) Golden proportions in musical design. Unpublished doctoral dissertation. University of Cincinnati, Cincinnati.

Pépin, Y. (1998) Practical Knowledge and School Knowledge: A Constructivist Representation of Education, in M. Larchelle, N. Bednarz and J.W. Garrison (eds), *Constructivism and Education,* New York, Cambridge University Press.

Persson, R.S. (1994) Control before shape – on mastering the clarinet. *British Journal of Music Education*, 11, 223-238.

Price, H.E. (1983) The effect of conductor academic task presentation, conductor reinforcement, and ensemble practice on performers' musical achievement, attentiveness and attitude. *Journal of Research in Music Education,*31, 245-257.

Punch, K.F. (1998) *Introduction to Social Research: Quantitative and Qualitative Approaches,* London, Sage Publications.

Rauscher, F.H., Shaw, G.L. and Ky, K.N. (1993) Music and spacial task performance. *Nature,* 365:611.

Sarnthein, J., von Stein, A., Rappelsberger, P., Petsche, H., Rauscher, F.H. and Shaw, G.L. (1997) Persistent patterns of brain activity: an EEG coherence study of the positive effect of music on spatial-temporal reasoning. *Neurological Research,* 19: 107-116.

Scott, J. (1990) *A Matter of Record: Documentary Sources in Social Research,* Cambridge, Polity.

Scott, D. (1996) Methods and Data in Educational Research, in D. Scott and R. Usher (eds.) *Understanding Educational Research*, London, Sage Publications.

Sharp, C. (1991) *When every note counts: the Schools' Instrumental Music Service in the 1990s,* Slough, NFER.

Sharp, C. (1995) *Providing Instrumental Music Tuition: A Handbook for Schools and Services,* Slough, NFER.

Sloboda, J.A. (1985) *The Musical Mind: The Cognitive Psychology of Music*, Oxford, Clarendon Press.

Sloboda, J.A. (1999) Address to the British Psychological Society's Annual Conference, Belfast. *The Psychologist,* 12, 9, 450-455.

Sloboda, J.A., Davidson, J.W., Howe, M.J.A. and Moore, D.G. (1996) The role of practise in the development of expert musical performance. *British Journal of Psychology,* 87, 287-309.

Smith, P.K. and Cowie, H. (1988) *Understanding Children's Development*, London, Blackwell.

Stake, R.E. (1995) *The Art of Case Study Research,* Thousand Oaks, CA., Sage Publications.

Strauss, A. and Corbin, J. (1998) *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory,* 2nd edn. Thousand Oaks CA, Sage Publications.

Swanwick, K. (1978) The Parameters of Music Education. *Music Teacher,* vol. 57, no.12.

Swanwick, K. (1979) Teaching in Groups. *Classical Music, Education Supplement,* 14 July.

Swanwick, K. (1988) *Music, mind and education,* London, Routledge.

Swanwick, K. (2001) An Overview: The changing scene. *Mapping Music Education Research in the UK, BERA Music Education Review Group,* 6-8.

Thompson, K. (1984) An Analysis of Group Instrumental Teaching, *British Journal of Music Education*, 1,2, 153-171.

Thompson, K. (1985) *Wind Bands and Brass Bands in schools and music centres*. Cambridge, Cambridge University Press.

Thurman, V.L. (1977) A frequency and time description of selected rehearsal behaviours used by fine choral conductors. Unpublished doctoral dissertation. University of Illinois, Urbana.

Trehub. S., Schellenburg, E. and Hill, D. (1997) The origins of music perception and cognition: A developmental perspective. In I. Deliège and J. Sloboda (eds) *Perception and Cognition of Music,* pp103-128. Hove, Psychology Press.

Usher, R. (1996) A Critique of the Neglected Epistemological Assumptions of Educational Research, in D. Scott and R. Usher (eds.) *Understanding Educational Research,* London, Routledge, pp.9-32

Verma, G.K. and Mallick, K. (1999) *Researching Education: Perspectives and Techniques,* London, Falmer Press.

Vygotsky, L.S. (1934/1987) Thinking and speech. In R.W. Rieber and A.S. Carton (eds.), *The collected works of L.S. Vygotsky, Volume 1: Problems of general psychology,* New York: Plenum.

Vygotsky, L.S. (1935) *Mental development of children during education,* Moscow-Leningrad: Uchpedzig.

Welch, G.F., Sergeant, D.C. and White, P.J. (1998) The role of linguistic dominance in the acquisition of song. *Research Studies in Music Education,* 10, 67-74.

Welch, G.F. (2001) *The misunderstanding of music,* Institute of Education, London.

Wells, G. (1999) *Dialogic Inquiry: Toward a Sociocultural Practice and Theory of Education.* Cambridge, Cambridge University Press.

Wenger, E. (1998) *Communities of practice: Learning, meaning and identity,* Cambridge, Cambridge University Press.

Witt, A.C. (1986) Use of class time and student attentiveness in secondary instrumental music rehearsals. *Journal of Research in Music Education, 34,* 34-42.

Yarborough, C. (1975) Effect of magnitude of conductor behaviour on students in selected mixed choruses. *Journal of Research in Music Education, 23,* 134-146.

Yarborough, C. and Price, H.E. (1989) Sequential patterns of instructions in music. *Journal of Research in Music Education,* 37, 179-187.

GLOSSARY

Al fine (It) 'to the end' an instruction to play to the indicated finish of a piece of music in forms in which the notation ends with the second section but the performance ends by repeating the first. Often preceded with *Da Capo* 'the head' to indicate to the player to return to the beginning and to finished at the indicated point.

Allegro (It) quick

Andantino (It) a little faster or more light hearted than Andante.

Cadence the conclusion or punctuation in a musical phrase.

Coda (It) 'tail' the last part of a piece of music or melody; an addition to a standard form or design.

Col legno 'with the wood' i.e. tapping the strings with the stick of the bow instead of playing on them with the hair of it.

Crescendo (It) 'growing' an instruction become louder.

Da capo (It) 'from the head' an instruction to placed at the end of a piece of music to indicate a return to the beginning.

Diminuendo (It) 'diminishing' an instruction to become quieter.

Dolce (It) sweet.

Dynamic the aspect of musical expression resulting from variation in the volume of the sound.

Fermata (It) 'pause' a point surmounted by a semicircle indicating showing the end of a phrase or indicating the prolongation of a note or rest beyond its usual value.

Forte (It) – 'loud', 'strong' abbreviated to *f* hence *fortissimo* (*ff*, very loud).

Glissando a sliding effect. On the voice, violin or trombone, the effect can be of a smooth rise or fall of pitch.

LEA Local Education Authority

m.p. (It) abbreviation for *messo piano,* 'half or medium soft' moderately soft or less quiet than *piano.*

Piano (It) 'flat or low' i.e. soft or quiet; abbreviated to *p* hence *pianissimo* (*pp* very quiet).

Pizzicato (It) the instruction to pluck the strings of a stringed instrument (that is usually bowed) with the fingers.

SEL structured ensemble ladder, as typified in a music centre

Soli (It) 'alone' (the plural of solo).

Rallentando (It) becoming slower.

Rubato 'stolen' of temp, extended beyond the time mathematically available; thus slowed down or broadened.

Timbre the characteristic quality of the sound produced by a particular voice or instrument.

Tutti (It) 'all' the opposite of soli or solo. More loosely, it used to denote a passage for full orchestra, or even the sound of a full orchestra.

(It) – from the Italian

Musical definitions are adapted from:

The Oxford Companion of Music (1970) 10th Edition, J.O.Owen (ed), Oxford, Oxford University Press.

And

The Grove Concise Dictionary of Music (1994) S.Sadie (ed), London, Macmillan Press.