



# Independent Evaluation of the OHMI Teaching Pilot

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## Executive Summary.

The One Handed Musical Instrument (OHMI) Trust aims to remove the barriers to music-making faced by the physically disabled, through the development and production of suitable musical instruments. To support the teaching and learning of music with adapted instruments OHMI, support by the Arts Council, was funded to conduct a teaching pilot using specially adapted instruments for children aged 7-11 years.

The first teaching pilot using specially adapted instruments for children with upper limb disabilities, took place in Birmingham. 15 children were selected. They received one-to-one lessons for a year, the opportunity to play in ensemble groups and participate in masterclasses. For this pilot programme, two types of specially adapted instruments were used: the 'AAFAB' one-handed descant recorder (<http://www.aafab.nl>) by Peter Worrell, and a trumpet support system, based on a design by Michael Prestage.

The teachers involved in the pilot were supported through a variety of activities including; initial training and continued reflective sessions. The project was evaluated by researchers from Birmingham City University, who, using primarily a qualitative methodology, observed sessions and interviewed teachers in order to explore teaching and learning.



## Key Findings.

1. Children with a physical disability are able to play musical instruments alongside their peers if some adjustments are made, both to the instruments, and to the teaching.
2. Teachers involved in the pilot found that they did not need to significantly alter their own professional practice.
3. Neither did they need to work with different teaching and learning resources, such as printed materials and backing tracks.
4. What teachers involved in the pilot did find was that for children with complex needs, they needed to proceed at a pace suitable for the individual child.
5. For many of the children involved, playing together in an ensemble meant that they were able to achieve together more than they had been able to on their own.
6. Aspirations of learners, teachers, and parents were in many cases exceeded by what they managed to do and achieve in this teaching pilot.
7. Classroom teachers in some cases were surprised by the levels of concentration and commitment that young people showed in their application to music learning.
8. Although it is beyond the remit of this research, the position of these young people with regards to Whole Class Ensemble Teaching (WCET, also known as 'Wider Opportunities') would benefit from some attention from music hubs.
9. Externally validated public assessment, in the form of Music Medals and other certification, works as both an incentive for pupils, and a motivating factor for them to pursue their music. However, there is still room for further work in this area with the Examination Boards.
10. Although the provision for the children involved in the pilot might be seen as being differentiated from 'normal' instrumental teaching and learning modalities, nonetheless this differentiated provision enabled

the young people to participate in learning to play an instrument, where otherwise this would have been unlikely to be the case.

11. The phrase “a spectrum of needs requires a spectrum of provision” has been used by OHMI, and this seems reasonable under these circumstances.

## **Introduction.**

The OHMI teaching project piloted the teaching and learning of specifically adapted musical instruments with physically disabled young people, aged 7-11 (Key Stage Two) in 7 primary schools across Birmingham. The funding offered the potential to explore virtuosity for these young people with physical disabilities, all of whom lacked use of one hand or arm, and for them to have undifferentiated opportunities to participation in music. The overall aim of the project was to establish best practice, to investigate utility of the instruments, to explore the potential to expand the project with other age groups and locations, investigate the scale of exclusion faced by young people with a disability, and propose suggestions of how this work could be taken forward. Birmingham City University's role in this inquiry was to explore the teaching of these instruments, which should be capable of being played to the highest level of virtuosity and the processes of learning involved.

An intention of OHMI is that undifferentiated musical performance is made possible for this group of young people.

## ***Research Objectives.***

The research, led by Professor Martin Fautley and Dr Victoria Kinsella, explored three elements:

1. The scale and depth of the current inequalities in music education provision faced by physically disabled people and barriers to undifferentiated musical participation.
2. The teachers, the training and support required to be able to deliver effective teaching to learners with a physical disability.
3. The learners, where pedagogic interactions with the teacher forms the focus. Although this is well explored in literature relating to the able-bodied, there is much new ground to explore in working with those with a physical disability.

## **Methodology.**

In order to investigate the OHMI teaching pilot, a qualitative approach was employed. There are many challenges when trying to understand learning and behaviour, especially in schools, where history and context are central to the environment. Knowledge and understanding is created individually and collectively but also governed by structural contexts. Engaging therefore in this complex environment requires not just one way of knowing and valuing but approaches that take into account diversity and difference (Greene *et al.*, 2001). As this research considers the importance of the voices of the participants, a qualitative approach was recognised as the most effective research paradigm. Mertens (2007) reminds researchers of the purpose of research, where investigation should have the social and democratic goal of being 'a transformative lens' (p.159). The concept of the 'transformative lens' is appropriate for this research, particularly as the aim is focused on enquiry into new teaching and learning processes. This means that not only is a qualitative approach democratic, but it can also can formulate rich data, which can affect policy through the production of descriptive knowledge, which Howe (2004:54) claims to lead to:

Deeper and more genuine expression of beliefs and values emerge  
...which fosters a more accurate description of view held.

## **Methods.**

The choices of methods for this research were selected on the basis of trying to best understand the complexities of teaching and learning. The research involved:

- observations of peripatetic music teaching sessions,
- focus group interviews with the teachers,
- observations of the OHMI ensemble,
- observations of OHMI performances,

- interviews with parents and stakeholders.

The research methods utilised sought to best represent the participants and ensure that data collected effectively accounted for diversity, and best signified their beliefs and perceptions.

### ***Participants.***

Participants in the research included: peripatetic teachers ( $n=7$ ), pupils ( $n=15$ ), parents ( $n=3$ ), and stakeholders ( $n=2$ ). To capture the lived experiences of the teachers and pupils, Moustakas (1994) suggests that research benefits from studying a small number of subjects through extensive and prolonged engagement. This allows a deep understanding of relations and meaning to be made. Cohen *et al.*, (2007) believe that this brackets understanding and personalised meanings in search of a true understanding of the environment being explored.

### ***Observations.***

Observation offered the opportunity to better develop an understanding of how knowledge was constructed within the peripatetic music sessions. Cohen *et al.*, (2007) have suggested that observation as a research process offers the researcher the opportunity to collect live data from a naturally occurring situation. In this manner, the researcher can observe behaviours which may 'go unnoticed', be 'unexpected', or 'taken for granted'. It also ensures that the researcher can document what happens within the classroom and not just rely on what people say they do (Robson, 2002). Peripatetic music lesson observations were conducted over two terms, with at least one observation of the peripatetic session per term, teacher and learner. This allowed the researchers the opportunity to explore progression in teaching and learning over the course of the project. Observations were also conducted of the OHMI

ensemble, which brought together the young people into a group teaching and learning space. These observations allowed the researchers to observe whole group teaching and the impact on learning. These sessions supported the two performances, held at Birmingham Symphony Hall and Birmingham City University.

### ***Focus group interviews.***

Although observations allowed the researchers to study behaviours and activities of the teacher and learners, semi-structured interviews with the teachers probed deeper into that which could not be observed. The aim of the interviews was to elicit the teachers' perceptions of teaching and learning and their thoughts and perspectives of the project. A semi-structured approach was chosen for the interviews which ensured that vital questions were explored relating to the research; however, they also gave space which allowed the exploration of themes to emerge. Interviewing is described as a useful data collection approach, examining the attitudes of participants and meanings that they 'ascribed to the phenomena' (Grey 2009:370). Arksey and Knight (1999) describe interviewing as:

A powerful way of helping people to make explicit things that have hitherto been implicit – to articulate their tacit perceptions, feelings and understandings.

We wanted the interviews to draw out deeper reflexive thoughts, but for them to also become part of the continuous process of the learning (Bolton 2004). Two focus group interviews were conducted at critical points in the teaching timetable to allow teachers the opportunity to reflect on their learning and teaching approaches. This became a reflexive process which allowed teachers to explore both their teaching, and the impact on learning of the various activities. By opening up a space for them to become critically reflective teachers, the potential for future change is increased.

### ***Interviews with parents.***

The interviews with parents aimed to explore their experiences, the opportunities offered, their accessibility, their perceptions on the effectiveness of the OHMI teaching sessions, and impact and benefits of the sessions on their children. These interviews were conducted at the end of year ensemble performance held at Birmingham City University.

### ***Interviews with stakeholders.***

Interviews with stakeholders were conducted after the end of year performance. The interviews aimed to explore perceptions of the value of the project, and perceptions of the effectiveness of the OHMI teaching pilot on learning.

### ***Data Analysis.***

Analysis focused on drawing out themes from the data. The data collected were analysed from an interpretivist perspective, which recognises the subjective nature of the responses. This formed a detailed picture of the impact of the teaching sessions on the teachers and students involved and allowed reflection on how the sessions might be developed and improved. The data from the questionnaire, observations, and interviews were analysed thematically and systematically to allow common and discrepant themes to emerge, thus endeavouring to reduce bias.

## ***Ethics.***

The research was approved by Birmingham City University Health, Education and Life Sciences Ethics Committee. The evaluation was conducted in adherence with the British Education Research Association (BERA) guidelines on ethical practice in educational research. Participants were informed of the research objectives and aims via a consent and information form. The research respected autonomy and the consent form noted that participants could withdraw from the evaluation at any time.

The responses were carefully monitored so that any issues relating to diversity and equality could be addressed, however none were identified. All participant names have been anonymised and changed in this evaluation report and any reporting of the evaluation.

## ***Methodological limitations of this research.***

The teaching pilot aimed to explore teaching and learning through the perceptions of the teachers, with the hope that this would impact on, and improve learning. Although pupil voice was taken into account, and learning observed, the focus of this research was on *teaching and learning*.

## **The Structure of Teaching.**

The children received a combination of one-to-one lessons and ensemble sessions. The attainment of students was assessed at the end of the year using the ABRSM Music Medals programme. This established musical criteria, and helped facilitate the measurement of musical progress. Music Medals were used as a valuable indicator of achievement for these disabled young musicians, and allowed them, their teachers, and the wider community to monitor, value, and celebrate their performance and skills.

Ensemble playing is an intrinsic part of music making, and it was considered vital that these children were given opportunities to participate fully in a range of undifferentiated music activities. Most young people with upper body motor impairments have no opportunity to take part in music-making. Part of the project also gave the children opportunities to perform with other ensembles and orchestras in a Birmingham Services for Education and City of Birmingham Symphony Orchestra (CBSO) concert, and via two concerts for parents, friends and stakeholders; one garden party held at Tyndallwoods Solicitors, and an end of year performance held at Birmingham City University.

## ***The Teachers.***

Teachers were recruited in partnership with Birmingham Music Service, part of Birmingham Services for Education. Many of the recruited instrumental teachers did not have prior experience of working with disabled children. OHMI were conscious of the extra support that disabled people may require in their learning. Therefore, CPD sessions led by OpenUp Music (<http://openupmusic.org>), were conducted prior to the peripatetic music sessions with the aim to support planning for teaching and learning. At critical points throughout the year OHMI met the teachers to discuss young people's progression, teaching and learning and the suitability of the instruments.

## ***The Pupils.***

As we have observed, many young people with a disability have reduced opportunities to take part in music making activities, compared to their peers. OHMI aimed to increase this participation through access to one to one peripatetic music lessons and a group ensemble. To reach the target participants, OHMI publicised the opportunity of instrumental lessons for 7-11 year olds with upper limb disabilities but with full cognition to families across the West Midlands. They were helped by partners such as:

- Reach and HemiHelp – OHMI attended family events and sent invites through email bulletins and editorials in their quarterly newsletters.
- Birmingham Children's Hospital Hand and Upper Limb Service – questionnaires were conducted with families visiting the clinic and this included information about the project and contact details for OHMI.
- Services for Education – contacted schools about the project and invited participants.

There are many disabling barriers to participation in music making, one key aspect of this OHMI project is the exploration and development of instruments which offer the potential for virtuosity to young people with a disability. Based on their specific needs, interests, and suitability, young people were matched with either the recorder or trumpet. Choice was given to the young people, supported by professional advice from the teachers at the opening event at the CBSO centre, where the young people got to try-out the instruments and participate in workshops.

## ***Observations.***

All 15 children and their teachers were observed twice during the teaching pilot. Once at the beginning phase of the project, and again towards the end. During the observations, notes were taken on teaching and learning strategies, communication, and the environment. Findings from observations will be presented under thematic headings.

## ***Pace and active engagement.***

Across the observations, the children were actively engaged for a high percentage of the time in the lessons. This was achieved through the teachers carefully considering the pace of the lessons and choice of activities. Pace is a critical aspect to these lessons, where often the children would need physical breaks from playing, due to the impact of disability. The teachers therefore broke up the lessons to include other learning activities. These included:

- Musical games using computer or tablet-PC apps.
- Discussions regarding the children's musical learning and progression
- Feedback on learning
- Informal conversations about musical interests
- The sharing of musical ideas

Suitable pace was evidenced in the lessons. For some of the children a fast and high-energy pace was better suited to learning and sustained engagement, their physical disability did not impact learning, but other educational needs impacting engagement and concentration needed to be considered in the planning of the lessons. These children benefited from fast-paced lessons which involved a variety of activities. Other children however required a slower intermittent pace where they could explore and develop

their mastery of the instrument. Repetition of materials was a feature of these lessons, but space was also given to allow for physical breaks and wider exploration of the instrument. The teachers utilised some of the other musical activities described above, which enabled them to explore the wider context of the child's musical development.



***Intended outcomes.***

The appropriate pace and time given to activities enabled the children to achieve learning goals and intended outcomes. They worked towards accreditation via Music Medals alongside personalised repertoire chosen by the children. For some children however, the teachers used their own judgement on suitable progression routes. This meant that in some of the

lesson observations children worked towards other outcomes and goals, such as compositional based outcomes, basic skills, and creating sounds on the adapted instrument as noted by the researcher<sup>1</sup>:

The teacher focuses the lesson on composition, using the instrument and garageband. By creating on the instrument and recording them onto garageband they then utilise the technology to compose a piece of music. The aim of this is to play it back to the student's class in a week. This provides excitement for the students.

### ***The 30 minute lesson.***

It was evident in the lesson observations that the time given to various activities impacted learning. The 30 minute lesson offered opportunities for personalisation, rest, and the opportunity to develop children's understanding of being a musician. For these children, this was important for their self-esteem. Sufficient time was given for them to progress, especially when physical breaks were needed. This allowed the teacher and child to investigate the wider context of the impact of music on their lives. This was explored by one of the researchers in their observation notes:

Without the 30 minutes progress would have been slow in the lesson. Due to the physical needs of the child, extra time was needed so that they could progress to the same level as a child without a physical disability. This should not be considered additional, but is a right of the young person in order for them to truly experience equality.

### ***Reflection in and on learning.***

Reflecting in and on learning was an important feature of the lessons. Throughout the observations the researchers noted how the teachers often

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<sup>1</sup> We are using direct quotations from researcher field notes throughout this report, as we feel this conveys both the immediacy and the ontology of the situations described.

changed the direction of teaching and learning to better suit the children's physical and cognitive needs. This critical reflection aided progression:

The teacher has recognised that the learner is starting to go off task. Sustained engagement, over a longer period of time appears to be difficult for him. So to encourage re-engagement the teacher introduces a new task, writing a poem. This poem is still linked to their previous learning (beats and rhythms) but introduces the concept in a new way.

Engaging in critical reflection means both understanding experiences in the social context and also to understand how it can develop practice. This is what Eraut (1995) referred to when he stated the importance not only of reflection in and on action, as previously identified by Schön (1983), but more importantly the one of reflection 'for action'. In the lessons, the specific identification of young people's intrinsic motivators, connections to prior experience and the appreciation of the individual young person's contribution to knowledge has been conducive for creativity, and has increased achievement and engagement. Through opening up lessons and considering children's choice new ideas and methods were explored:

The teacher and student talk about favourite songs. This very quickly engages the student in the lesson. They negotiate between them how the lesson will be structured. They decide to begin with the pupil's favourite song to play (not linked to a Music Medal) and then move onto practicing for the Music Medal. This offers the student choice and independence, but also addresses specific intended outcomes for the lessons.

After a couple of lessons the teacher discussed how through engaging with other teachers they were able to explore new teaching and learning approaches. The ability to critique practice through reflection can radically change teacher perception, and the role of reflection on teaching has been documented as an important process (Rodgers 2002). The support offered by the other teachers in this OHMI pilot enabled these processes of reflection. Conway (2001) believes structured reflection is integral for teacher development, and claims that it should become a key aspect of continued

professional development for teachers. For these teachers, working with a diverse range of children with varying additional needs, the support and opportunity to share ideas was crucial to continued professional development, and, ultimately, the children's progression.

### ***Environment.***

For many of the children the spaces for music-making are important for learning. Some of the spaces and environments offered by the schools for the music lessons were not always felt to be optimum. For some children, for example those with more complex additional needs, getting the environment right can made an impact on their engagement:

The lesson is located in the entrance. Unintentionally, the lesson is disrupted by children and teachers passing by. Could the school have found another space for the lesson to avoid this?

This was also experienced in other lessons, where timing and space impacted learning. The room for the lesson overlooked the playground, and, with the lesson stretching into break-time, the child sometimes got distracted:

The signal of the bell has had an impact on his concentration. Although the teacher is able to get him back on task, could the timing of the lesson be re-arranged to avoid this? Or the location of the lesson so that he is not overlooking the playground?

The thoroughfare nature of some of the teaching spaces could also have been an issue for learning. However, by way of contrast, sometimes they proved to be useful, although accidental, spaces for sharing with the wider school community:

A teacher has walked through the lesson and commented to the child about their progress on the instrument. They give the child praise and acknowledge the work of the [instrumental] teacher. This visibility is important so that other professionals can see the learning and encourage this beyond the lesson.

Although the open space meant that staff members and other children walked through, this provided unintended learning outcomes, and shared knowledge with other professionals, which aided learning. In this example the visibility of the lessons increased professional understanding across the school.

### ***The adapted instruments.***

The adapted instruments used in this OHMI pilot have been described earlier. The one-handed descant recorder was available in two varieties, depending upon whether the learner had the use of their left or right hand. This obviously affects how the adaptations are made to facilitate hole-covering for the different notes. The trumpet was much less adapted, in the sense that the primary difference was the provision of a stand, The stand was designed to be able to take the full weight of the instrument and allow embouchure pressure (needed particularly for higher notes), while permitting sufficient flexibility for body and embouchure movement, so that the fingering facility of either hand was available to play the valve mechanisms 'as is'.



Photo Credit: Huw Meredith

There are clearly technique issues for trumpeters here, as one key element of brass playing is being able to secure a relatively airtight grip between mouthpiece and lips to enable the characteristic 'buzz' which brass players employ to make sounds. The teachers involved felt that the adaptation enabled this to take place.

With recorders, an issue was the fact that they were made of wood. This usually signifies a higher quality of instrument than the more common plastic variety often used in schools. However, one issue commented on by the teachers was the propensity of wooden instruments to 'block up' due to condensation, and, not to put too fine a point on it, dribble! Some of the teachers wondered whether a plastic head-joint upon the wooden bodies might go some way towards addressing this problem. This might be something that could be profitably investigated in future iterations of this work.

### ***Channels of communication.***

There are many different forms of communication channels between teachers, the school and the home. The OHMI project utilised practice diaries as a route to share learning within and between the school community and home. In general, a practice diary is regarded as a very useful way of maintaining communication between children, parents, and teachers on progress. It also provides parents with an opportunity to draw the teacher's attention to any difficulties, to ask questions, and enables parents to keep track of musical practice required at home for progression. Although for some of the children the practice diaries created that link between the lesson and home, for others the practice diaries did not work as effectively. This was due to a variety of factors observed in the sessions:

- The children were not taking their practice diaries home
- Some of the children spoke English as an additional language. The likelihood is that parents would also have English as an additional language, and therefore may not be able to read the diaries.

- There was a lack of understanding of the importance of the diaries by the children, the schools, and parents.
- During the course of the year some of the children and parents got out of the habit of using them.

### ***Music medals.***

Music Medals provided a valuable indicator of achievement for many of the children. The Music Medals offered them equal opportunity with those children without a disability. It also gave the project children an aim to aspire to, and a defined learning outcome.

However, for some of the lesson observations, Music Medals were not a feature, nor were they appropriate for the child's learning and progression. Instead the teacher created their own awards that the children could work towards, often leading to a performance in front of their school in assembly or their class.



### ***Feedback on learning.***

Questioning was often a crucial part of interactions between teachers and children. Throughout the year the teachers began to frame questions in a way that allowed pupils to have enough time to answer, the 'wait time'; teachers also offered different stimuli to support questions, for example visual and verbal stimuli.

For some of the children with complex needs, including speech and language delays, the teachers began to recognise the children's ways of responding. For example, eye contact, movement of the head, and different sounds relating to enjoyment or frustration. Communication between teacher and child increased over time, due to the teachers developing understanding of the differing forms of communication.

## **Teacher interviews.**

The purpose of the interviews was to provide in depth qualitative data on the teachers experiences and perceptions of the OHMI teaching project. The interviews were analysed thematically to address the evaluation questions. They were conducted with as many teachers as possible in a central location at Birmingham City University. 6 teachers attended the first focus group in April, and 5 in the second focus group in July.

### ***Focus group interview findings.***

The interviews were conducted at two pivotal points in the teaching programme. The first interview was conducted in April. This was still a relatively early stage of the project, with the young people having engaged in activity for a few months. In April, many of the young people had learnt some basic skills and were considering working towards music medals. The interview explored themes such as: progression, teaching and learning, motivation, teaching materials, the instruments, successes and challenges.

The interview in July explored the same themes but with a focus on reflecting back on teaching and learning and how that informs future practice.

The themes from the focus group interview data have been organised in line with the questions from the interview schedule. The purpose of the interviews was not only to gauge teacher perceptions but also to allow them to reflect, make sense of their experiences, challenge their perceptions through listening to others and shape what will happen next. In this sense the interviews served as an action research approach as they enabled the teachers to discuss challenges, successes, and teaching and learning which informed practice.

## ***Teaching.***

Although the teachers were experienced in teaching peripatetic music lessons, many of them came into the project with little experience of working with young people with a disability. To support the teachers, OHMI and Openup Music led CPD sessions prior to the teaching pilot in order to help the teachers consider potential challenges and teaching and learning. This enabled teachers to consider planning for learning, approaches best suited to these young people, and skills required.

Based on the learning from those sessions, the researchers began the interview exploring teaching and learning. Specifically, how the teachers planned for learning. Some of the teachers approached the lessons in the same way they would with a young person not using an adapted instrument or with a disability. They stated:

I just approached it exactly the same as I do with everybody else. I have a set regime, like games which I do with all the children I work with, around breathing and control.

I've not changed the way I would teach, I've done exactly the same as I would with any child.

I just taught the same.

Low expectations of what children with special educational needs and disability (SEND) can achieve through music education often hold back their progress in music. The OHMI project aims to create the potential for virtuosity through the use of adapted instruments and supporting equipment. By doing so, progress for these young people no longer became an issue. According to one of the teachers it was their understanding of the instrument that needed adapting rather than teaching and learning. The undifferentiated participation offered by the instruments meant that the children's disability was no longer a barrier to learning, but instead that the teachers needed to *un-learn* what they knew about the non-adapted instruments:

I had to get used to the instrument. It was new to the children so they didn't know any different. It was a first experience for them, just like any instrument for any young person. I've learnt to play the trumpet left handed, because if I'm playing it the same as them, then I'm going through all the same principles as them.

As another teacher notes:

There are totally new fingerings, but other than the fingering, everything is the same, like the other technique system.

For many children, the adaptations to the instruments meant that learning was at a typical pace. For one recorder teacher, the beginning phase of playing the recorder was quicker due to the fingering placement on the adapted instrument:

I think once they've got the hang of the keys, you probably get a B, A, G faster, because they're not having to cover the holes. The hardest thing with a young person playing the recorder is B, A and G and having to keep their fingers on the holes. Whereas once they've got the idea of the keys on the adapted instrument, actually they get B, A, G really quick.

Although the adapted instruments offered undifferentiated opportunities for the young people with a physical disability, many of the young people also had additional needs that needed accounting for. These included profound and multiple learning difficulties and disabilities, emotional and specific learning difficulties and a range of moderate learning difficulties. Teaching therefore had to be planned differently for these young people. For this, the teachers described breaking down the learning process into smaller steps, guided by the young people themselves. One teacher noted their approach to the sessions:

I'm working with two children with fairly severe cerebral palsy. Unlike following the typical steps and processes, I've got them to make up their in-between steps. It's about filling in the gaps. So I've got different kind of stimulus with them.

A key aspect of the teachers approach discussed here is allowing *the children* to break down the process. The teacher did not prescribe approaches but explored with the young people to most effective way to develop practice. Understanding physical and cognitive needs was central to learning and increasing the children's involvement in the learning processes was central to development. For these children, usual approaches to teaching and learning were not appropriate. This however did not mean that the same learning outcomes could not be achieved, but, rather, that more time needed to be spent collaboratively for teacher and learner working out the best approaches to learning.

### ***Changes to planning and teaching approaches over time.***

The more time the teachers spent with the children, the more targeted teaching and learning became. It was over a number of sessions that the teachers began to develop a greater understanding of the range of needs, communication approaches and cognitive abilities of the children. This knowledge enabled the teachers to create more targeted, specific and individual lessons as described by one of the teachers:

Researcher: Have your teaching approaches changed over time?

Teacher: Mine has, but only because of other needs. It is not due to the fact that it's a one handed recorder, it is more about the learning. I have changed my approaches just because of how he learns but that's nothing to do with the fact it's one hand. But then it's the same with other kids isn't it? They might have both hands but you change how you teach to suit them.

A key point to note from this quote is that this would not be untypical for an able bodied musician as much as a musician with one hand. But what is significant is that the child's physical disability did not impact learning, but other cognitive difficulties posed challenges for the teachers. The teachers therefore had to consider additional approaches suited to the young people.

Part of this process included understanding the various forms of communication as described here:

... When he doesn't know something or he's worried about something he smiles, and often when a child is doing that you think they're either, that they do get it and that he's learnt that. But I began to understand that this was not the case.

Through developing an understanding of these modes of communication the teacher was able to design lessons and deliver them in way which engaged the young people more effectively for progression:

This was a key moment for me and I could now better understand how to move forward with them and help him progress.

### ***Reflection in and on practice.***

A key part of reflection was listening to and observing learning. Although the teachers had a specific learning goal in mind regarding Music Medals, they were flexible with children, and based lessons on their needs and interests. During the interview they describe their reflection in action processes. Schön's (1983) notions of *reflection in action* and *reflection on action* have already been mentioned above. What the teachers describe in the following quotations are their reflection in action processes, where they describe how through the sessions they carefully monitor and remain constantly aware of observing practice as well as teaching and learning. This awareness allowed them to make changes to their teaching approaches as they developed, teachers were 'thinking on their feet'. One teacher describes here how they ask the children directly to help them find the most appropriate way forward:

I've learnt not to be afraid to ask the children what they think will work. They are used to living like this, they know what works best for them. So I'll ask stuff like: How do you think you can do that?'

This knowledge led onto post-lesson reflections that informed subsequent planning and preparation.

Another teacher describes working with a child who had profound and multiple learning difficulties. Due to this, the teacher adapted the initial planning which focused on particular skills and outcomes:

*(Name)* has little control over any movement at all. I suppose the physical limitations are hindering the progress that they can make. I've had to kind of make things for them to do that are within what they can do. So we've done lots of composition, lots of improvising, we've even made our own backing tracks to go alongside the stuff that we've done.

What the teacher did was to plan a session based on individual and specific goals, with less of a focus on mastery of the instrument, but more on the exploration of sound. Progression looks different for everyone, and for this young person the Music Medals would not be achievable in the timeframe. But this did not mean that they could not become a musician, just that conception of progress had to change:

I noticed when they had the mouthpiece they had trouble holding it to their lips. I think, given a few years, they probably would be able to play a tune but it wouldn't be to grade 1. So I've had to find things to do around the one, two notes phrase sort of mark. These goals were more achievable and suitable.

### ***Teaching materials.***

Assessing the musical development of the children was important in the project. The aim was to utilise Music Medals as a way to explore development and progression. There are five progressive levels. Copper and Bronze are stepping stones to Grade 1. Silver, Gold and Platinum reward further progress. The Music Medals also served as a motivation for the children and something to aim towards. Most of the children worked towards the Copper level Music Medal where teaching materials did not need to be adapted:

I've used exactly what I'd normally use. I've not needed to change it in anyway. I think it's a good way to measure progress.

Some teachers had to devise materials themselves due to different fingering. But as this teacher stated, this was not something that the children had prior knowledge of, and so did not adversely affect their learning:

They don't know that it's different. They don't know that it's backwards. It's not backwards for them, it's forwards.

It has been discussed earlier that low expectations often affect the progression of children with a disability. One teacher noted:

The Medals are quite basic really.

Following on from this another teacher commented on the suitability of the Music Medals for one of their students:

One of my students was beyond Music Medals and could go more for graded examination instead.

A critical point here is that the teacher in this instance understood that the student's learning could extend beyond the expected. Expectations were higher in this instance.

However, although Music Medals provided good stepping stones for many of the children, for some, progression towards Music Medals was too great. Progression for these children was at a slower pace due to their physical disability or other educational needs. This is not to say that music medals would not be awarded in the future, but that more achievable stepping stones and awards were needed to keep the children motivated and engaged:

Their progress isn't quite the same, so I designed my own awards to give them something to work towards and praise them for.

Another teacher discusses this in relation not only to progression but affordability:

... If they don't get to Medal standard by the end of this year, I'm going to make up my own test and do it with them. What I did in a school that couldn't afford to do Medals was I just did my own test and then printed out some certificates.

Although the Copper and Bronze Music Medals were achievable for many of the children, advancement to beyond that would not be as attainable. One teacher notes that this could impact motivation:

I didn't realise that a physical disability would affect so many children with special needs. I was able to get my student to the second Music Medal but I can't see them progressing beyond that in near future.

A number of the children displayed other additional cognitive needs which potentially would impact progression through a standardised grading system as stated by this teacher:

They did the copper Music Medal this year, but I don't think they cope with the pressure of doing a grade exam. I think to go and take a grade would be too difficult. But I think the Medals meant that they felt like they had achieved something, and I think whether you do a Medal or not, as long as they feel like they're achieving something then that's all that's important.

And this teacher stated:

It's not playing that's the problem, it's comprehension of things, so we need to break things down more.

A critical point here is the relevance of the Music Medals and their suitability for children with physical and additional cognitive needs. During interviews the teachers began discussing the relevance of the Music Medals, and whether they play a key role for progression in teaching and learning. One music teacher discussed how the Music Medals detracted from other skills being learnt, and the lack of student choice:

I'm not necessarily sold on Medals at all. I find that working towards Medals often detracts from learning a wider range of things. You have to get to a certain standard. There often becomes resistance to practising that one piece they haven't actually chosen. I don't know even how great it was for my student. I mean I think it was good for them in some ways but actually what they loved playing was the kind of

more 'poppy' stuff that we did as well. But we were only able to do that because they are quite able to do a few pieces at a time.

Making music relevant was important. Alongside the Music Medals the teacher explored other genres of music with their students, which involved them in the decision making process, thus fostering independence. This puts into question whether Music Medals are automatically suitable, or whether another form of assessment might be more appropriate for learners with a range of complex physical and cognitive needs. Because of the unsuitability of the assessment and the lack of perceived progression, one teacher discussed how one of their students did not want to continue to play their instrument:

One of my students would never ever make a Medal and they decided not to carry on into a second year. They felt like they had achieved something when they could hear their own music being played back because we did a lot of composition and working with Garageband so they still felt like she was getting somewhere. But expectation of what should be achieved may have had an impact.

### ***Communication and collaboration with other professionals.***

Peripatetic music teachers can often be isolated and disconnected from other members of the teaching staff in schools. It can therefore be difficult to share good practice, knowledge and understanding of children needs, aspirations and interests. In the interview, sharing practice became a focal point for conversation for the music teachers. They identified that music teachers and other members of staff should inspire and inform each other's work. One of the music teachers noted how through overhearing the class teacher using specific questioning to talk to the children, they began to pick up strategies to help with communication:

I clocked a few things that the teacher was saying and I asked them about these and they were like 'Oh, it's sort of like classroom learning stuff, it probably doesn't mean anything to you.' And I said, 'Hit me with

it! I think once they realised that actually it's really useful for us to know that stuff, and even though they might be thinking like that's English, actually once they realise it might help and you can help them.

Collaboration with other professionals was identified as playing a significant part of teaching and learning in this case. Learning more about different communication and other relational strategies enabled the music teacher to make quicker progress with the child. The teacher describes this as 'breaking down the barriers' and recognising the potential in collaboration:

Once I'd broken that barrier with them they were quite forthcoming with more things, but it did take a little bit for them to see it as something that might be beneficial for them to do.

This created a collaborative working relation, as highlighted here by one of the teachers:

The speech and language therapists were coming into the lesson, to pass through the room, and when they did they were saying things to the students like: 'That was really good. Can you show me that?' or 'Make sure you're doing your good sentences'. So I'm picking up, conversation techniques. I asked her [the therapist] 'is that something I should try with him' or 'is that something I should work on?', and she'd say 'Yes, perfect'. It's just about tying it all in, making connections. But you only really get that from them (the professionals) knowing who you are and getting to know you.

The teachers commented that if a more collaborative approach was taken to sharing information prior to lesson starting, progression and planning could be individualised from the outset:

I was told my new child has right-sided hemiplegia but they didn't tell me that they also had a diagnosis of autism as well. So there's different information we are not told, but it's useful to have all the information before you start.

### ***Impact on the teachers.***

Throughout the OHMI teaching pilot the teachers gained new knowledge, experience, and understanding of working with children with physical disabilities and special educational needs. In particular they have thought about new ways of approaching lessons and learning:

Thinking more creatively, by thinking of ways to keep their attention and motivation. I think that's been enabled though the combination of me getting to know him and him getting to know me. It's building up respect and a good working relationship as well.

### ***Learning.***

A typical peripatetic music lesson would normally have a duration of 20 minutes. For this project, the teachers were given 30 minutes for teaching and learning. This allowed the teachers time to explore appropriate pace and challenge, whilst also ensuring sufficient time was given for focus and successful learning for all children. As highlighted above, the children had a range of physical as well as additional learning needs that required appropriate planning and execution in each lesson. One of the music teachers describe how this additional time impacted learning:

It's a luxury! It gives you that time to change how we're doing stuff to really suit them. It gives you that time to get to know them, enough to be able to go ok that's not working out but don't worry it's not the end of the lesson. We've still got some time to do some other stuff.

Personalisation and time spent exploring the children's preferences and learning approaches was critical in these lessons. Other extra-musical skills were also developed:

It develops so much more than just skills. It gives you time to look at other stuff as well, not just actually 'oh we're going to play this or that'.

You can make sure you've got time to play games at the end of the lesson and increase motivation because you've got that bit of time.

A particular challenge for learning in the OHMI pilot was the impact it had physically on the children. The children would often need physical breaks. Therefore the teachers utilised this time as an opportunity for personalisation, often through musical games or conversations regarding music pupils listen to. Without the 30 minute lessons progression would not be possible to the same degree as for those without a disability, and learner motivation would potentially decrease, as described by this teacher:

If he's tried something new and it's challenging, he might need a break. But because of the time he's not left with just challenges. I mean he finds everything at school hard and he really loves his lessons but he can find some aspects a bit hard in what we do, but the extra time means that there's still time to do something that's fun afterwards. When he leaves, he feels like: 'I've done it and I've achieved something'. He really likes the instrument and this way it is still fun, even though he's done something that might a bit of a challenge.

Another teacher notes:

(*Name*) gets a bit tired due to their physical disability. In the lesson there can sometimes be a little bit of a lull, and she'll go 'I'm tired'. So that's the point where we do something else but we always come back to finishing recorder, which is what she wants to do.

A central part of teaching and learning in the teaching pilot were the relationships developed between teacher and learner. The extra time allowed the teachers to understand the children, make music learning child-centred, and place music within the wider context of the children lives:

You get a relationship going, you've got time and you can have a bit of a laugh and fun. I think it's not only just the actual music side that's important with these children, but the relationship that you can get with them gives you that extra advantage in terms of teaching.

Not only did the extra time allow for personalisation, but also the exploration and continuation of learning between lessons:

I think if you've got a 20 minute lesson in Music Service, I don't think I've ever delivered a lesson where I've said 'and next week we're going to [do something specific]'

To further engage and motivate the children, one teacher utilised the 30 minutes to add a collaborative aspect to the lessons. For this, each child received 20 minutes of individual time which was then conjoined with a 10 minute overlap for collaboration. The teacher describes the impact of this collaborative time:

In one of my schools I have two children, so I have an hour of OHMI teaching. I have [one] on their own, then [both] together, and then the next one on their own...We can do more structured activities together, like improvising animal noises and things like that. They love that and they love the competition element. They're young boys and they love being together. They're always wanting to have that group time, but they need their alone time too to progress. But it's worked really well to have them individually and collaboratively.

### ***The ensemble.***

Playing an instrument can lead to a sense of achievement, an increase in self-esteem, confidence, overcoming barriers when learning is difficult, and provide a space for self-expression. Alongside developing individual musical skills, participating in the OHMI ensemble has enabled the children to extend wider social and emotional skills alongside knowledge of working with others, and performing in a group. Participating in the ensemble has promoted friendships with other children who have similar disabilities; this has increased the children's self-confidence; social skills; social networking; a sense of belonging; team work; self-discipline; a sense of accomplishment; co-operation; responsibility; commitment; mutual support; bonding to meet group

goals; increased concentration and provides an outlet from school based music lessons. A critical part of the ensemble has been the contribution it has made to the development of the children's self-identity, and the source of support it offers. Here is how it was described by the teachers:

One parent told me that her daughter had never felt like she fitted in anywhere but she loves coming to the ensemble because everybody else is like her.

(Name) has gained so much confidence as well. He came to me yesterday and couldn't wait to play.

His confidence from beginning until now has been astounding. He has developed so much.



To help the children progress the music teachers had to differentiate the music in the ensemble. This also included them arranging music that suited the both trumpet and recorder, instruments that otherwise might not normally be in an ensemble together:

We had different instruments that would never normally be put together. We had to think carefully about what we would do so that they could work together and make progress.

### ***Wider Impact on children's learning.***

The music teachers observed that the children's involvement and participation in the music lessons had a positive impact on not only their musical activity, but also on their wider educational and social lives. As the music teachers became more embedded within the schools, other teachers would comment on the positive impact of the lessons on the young people in school:

She wears her Music Medal badge with pride.

It's backed up by everybody in the school saying 'oh you're here. He loves recorder'. I walk in the office and they say 'He'll be pleased to see that you're here'. For him the thirty minutes he is getting that individual attention you can see he's just really confident because of it.

He's now more confident, you couldn't have ever imagined this kid standing up in front of his class and playing. He's done all these things

The impact on the children identity has been significant, they are now considered musicians:

They were saying how before he started music, he was quiet, he was just a kid with cerebral palsy. Now, he's the trumpet player!

This has enabled the class teachers to review their perceptions of what these children can achieve, as noted here by one of the OHMI music teachers:

I teach in the corridor with the door open, and the head started came past and said 'I can't believe it', in class he [the pupil] won't sit or focus on any task, but every time she walked past, he's clearly doing it and focused.

The danger being however that music lessons are seen as an added extra, or reward, for good work in other areas of the curriculum. The teacher goes on to explain:

I think though now they use it as a bribery. They hang it over his head because they know he really loves recorder. They'll say 'you need to do this because...' well they won't say he can't do recorders but 'don't forget, you need to do maths today. Lots of maths on Monday because you miss maths on Tuesday to have your recorder lesson'.

One area of concern for the teachers is the impact that Whole Class Ensemble Tuition (WCET, also known as 'Wider Opportunities', or 'First Access') may have on the children's musical development and self-esteem:

The problem with, not problem, it's not a problem at all, but she's now doing wider opportunities, whole class flute. This is fine for her as she plays recorder but what about those classes whose wider opportunities won't be a similar instrument?

This was further explored and concerns raised with another teacher:

He is going in to Year 4 next year, so he will be doing whole class music. I need to speak to the ukulele teacher ...I would have thought he'd be really frustrated if he couldn't do something because he's quite musically able. So playing the recorder will hopefully provide a solution. We'll see.

However, it remains to be seen how an already differentiated child will feel, and achieve when playing recorder amongst a class full of ukuleles, thus clearly 'othered' again.

## **Interviews with parents.**

To gain a richer understanding of the impact of the project on the children's lives, the research team interviewed a number of parents to gather their perspectives on the wider implications on learning. The parents described increased self-confidence, enjoyment of playing the instrument, the impact of the ensemble on making friends, and increased motivation for learning as key factors:

It's something that he does that none of the other kids are doing in his class, so it's given him a lot of confidence. He's also had the opportunity to play in front of his class and show these new skills. (Parent A, interview data)

The first thing he did when he walked in to the ensemble was sit down with the lads that he met when they went to the CBSO, so he feels part of the group. If you observe him in the playground, he just walks around on his own. I've been taking him to school for 18 months and not once has a child said hello to him, which is kind of sad. But here and now he's sat down and they have said hello to him. So for us, it's kind of rewarding. (Parent B, interview data)

He didn't really know anyone with his own disability because he goes to mainstream school and he's the odd one out. But with the ensemble and with going to the classes, he's met more children with similar disabilities, so it's exciting to know that he's not the only one with that disability. (Parent C, interview data)

She absolutely loves her lessons. She looks forward to going. You know, she could forget her homework, but she'll never forget her musical instrument. She plays it at home as well. She loves it. (Parent D, interview data)

For some of the children accessibility to the ensemble was difficult. OHMI offered transportation to the ensemble but some parents were unable to make the times of the sessions. Consideration of times, locations and offering

children other opportunities would be something that could profitably be addressed in the future:

The only issue for us was, because we've both got full-time jobs, he wasn't able to attend the ensemble. When we've come to do the performance practices it's great because he'd has an opportunity to socialise with other kids and he really enjoys that. He's quite a loner in school and he's really enjoyed being part of the group so it would have been so much better if we could have gone to the ensemble. And if there's the opportunity to do that next year I think, as long as he could be in the group with the rest of the kids, he'd love that.



## **Interviews with Stakeholders.**

After the performance two stakeholders from supporting charities were asked to comment on the project and their perceived impact on teaching and learning and provision. One of the stakeholders had direct experience of the barriers to music in school for those with physical disabilities. The accessibility of the instruments was a key factor of the project for them:

It's a new opportunity and it's a new opportunity without struggling in the way that some of them were struggling to access the usual instruments in their schools. They weren't met with failure. This was something they could do.

Although the stakeholders recognised the importance of the project for these young people and the steps it is taking to break down barriers for children with physical disabilities, they also stated that it is just the beginning of the work that needs to be done to offer undifferentiated virtuosity. In particular, the impact and issues regarding wider opportunities were discussed:

When you have schools choosing instruments and choosing Wider Opportunities, they're not thinking in the way that OHMI are thinking. We have to deal with those problems.

Removing instrumental barriers and offering virtuosity was described as an important aspect of Wider Opportunities (WCET) that often gets overlooked:

Wider Opportunities can actually put our children at a disadvantage if issues haven't been thought through. It is the anticipating and the planning and the getting rid of barriers before children are faced with them that needs consideration. We're always saying to schools it's not enough to say lets encourage the children to get on with it. They can't get on with it unless you've removed some of the barriers.

Barriers to WCET sessions needs to be considered so that they do not restrict choices for disabled children. The social model of disability states that a disability is caused by the way society is organised, rather by a person's impairment or difference. The OHMI teaching pilot has highlighted issues surrounding wider opportunities for young musicians with a physical disability and the need for more inclusive approaches moving forward.

## Discussion.

### *Understanding learner needs.*

A significant aspect of the teaching pilot has been the necessity of trying to distinguish between physical and cognitive challenges. There were significant differences in the learning needs of the children in this study. Some – but very few – children had only physical disabilities, but no additional educational or cognitive challenges, whereas others had both physical *and* additional educational needs. It would be helpful, therefore, if training and support offered to teachers prior to and during teaching could not only include orientation regarding the instrument, but also training and CPD which explores communication with, and teaching approaches for, children with additional complex needs. A key factor in this provision is good communication with schools and information sharing regarding the young people. This could be achieved through sharing individual educational plans (IEPs), something which at present we know that many Music Services and Music Hubs struggle to obtain all over the country.



## ***Learning.***

The varied and differentiated needs meant that learning for some children was more-or-less equivalent in terms of cognitive demands to learners without a physical disability. However, for those children with additional educational needs the early stages of learning often tended to be slower. Time scales in terms of progression and specific learning goals need to be carefully planned so that all learners feel a sense of achievement and progression. For some the Music Medals goals were not achievable in the time scale of the project, therefore it would be worth investigating whether something like an OHMI-specific award scheme could be created to offer the children motivational goals.

## ***Distributed cognition through the ensemble.***

The ensemble offered the children a space in which they could develop knowledge, share experiences, explore notions of identity, and expand their individual learning with a group. Within the ensemble participants there was a mixture of expertise, and a range of disabilities and complex needs. Because of this, activities had to be differentiated. The teachers successfully managed these differences through the selection of appropriate materials, one-to-one help, and peer support. The ensemble offered the children a space in which they were able to extend their understanding of what it means to be a musician. A critical aspect of this was bringing together children with similar physical disabilities. The impact on their confidence increased through the recognition of others in relatable situations.

The most significant aspect of the ensemble was its impact on learning both socially and musically through distributed processes. Distributed cognition attributes group thinking as the most effective form of development of knowledge, rather than individualised cognition (Salomon 1993; Cole and Engeström 1993). Rasmussen (2001:579) states that distributed cognition can help to produce:

Ideas and thoughts in a group which would probably not have occurred outside the group; thus, discussions in groups can lead to the acquisition of insights which no participants felt they possessed before taking part.

Aligned with learning theories of Vygotsky (1978), and Lave and Wenger (1991), the notion of distributed cognition underlines understanding that social processes can have impact on learning. Salomon (1993: xiii) claims that through distributed processes:

People appear to think in conjunction or in partnership with others. The thinking of these individuals might be considered to entail not just solo cognitive activities but distributed ones.

Making music in the ensemble led to group connection, social cohesion and extended skills and music making abilities. This distributed cognition approach (Salomon, 1993; Nardi, 1996) also allowed the children to work in what Vygotsky would recognise as the Zone of Proximal Development (Vygotsky, 1978; Daniels, 2001) which allows the children to attain at a higher level than would otherwise be possible.

### ***Planning and preparation.***

The development of an individual educational plan (IEP) includes the collaboration of a range of professionals for planning for a student's learning and educational needs. This allows teachers and other professionals to make learning meaningful, individualised and appropriate. From the outset the teachers understood that they would be working with children who had a range of physical disabilities. However, they did not expect the range of other complex needs which would also be a factor of learning. To help teachers prepare and plan for learning it has been identified that IEPs could be shared with the teachers, so that they can utilise extant professional knowledge to aid planning, communication and teaching approaches. The teachers could then

also share knowledge through the IEP, which would then become a developmental working document. It is therefore suggested that:

- Teachers are provided with student educational information from the outset to help plan for learning and more effectively meet their needs.
- Parents also offer up additional information and provide consent for the IEP to be shared with the music teacher.
- Music hubs explore ways of sharing information and forms of communication with schools, so that teachers are better informed of additional or complex needs of the children.

### ***Lesson time, environment and structure.***

A significant aspect for learning for these children, were the 30 minute lessons. This time allowed them to:

- Progress at a pace similar to a child who does not have a physical disability. This was through physical rest times, where the children could explore other musical activities.
- Develop an understanding of what it means to be a musician through talking to, exploring and experimenting in and with different activities other than solely learning to play their instrument.
- This also enabled motivational time to be built in during the session.
- The 30 minute individual lessons gave the teachers more scope to adapt their usual materials and approaches, where needed.

Linked to the timing of the session is the space and environment of learning. As explored in the observations and interviews some spaces were not suitable for learning, causing distractions. Other situations however also provided more external visibility of the lessons and an increased awareness of the learning taking place in the music lesson. Therefore consideration of appropriate spaces within the school needs to be undertaken. This could be

planned with the music teacher and other professionals who contribute to the child's IEP.

### ***Teaching resources.***

- Printed resources already available were suitable, they did not require much by way of adaptation.
- Backing tracks already in use elsewhere were utilised
- Tuition on specific notes was rearranged as appropriate (on the recorder) depending on the fingering patterns of the specific instruments and learners - this was not a significant issue
- Integration with other teaching in terms of resources was straightforward, no major adaptations were required
- Speed of learner progression, always a matter of professional judgement, was very much to the fore here.

### ***The community of practice of the music teachers.***

To venture beyond traditional established practices the music teachers had to expand their teaching approaches and create learning encounters that explored new forms of learning. Peripatetic music teachers often work in isolation. The opportunity to meet with other teachers through the pilot project, via research gatherings and performances enabled the teachers to discuss and reflect on teaching and learning, alongside investigating challenges and successes. Many of the teachers continued these conversations less formally on a regular basis. Being part of this community of practice (Lave and Wenger 1991) was an important part of the teachers' professional development.

### ***Communication beyond the music teachers.***

Communication with others beyond the lessons was highlighted as a significant aspect impacting learner progression. Communication with others involved in the children's education can increase both the teachers' awareness of communication and learning needs, and extend learning beyond the lesson. This includes:

- Communication with parents through practice diaries needs to be an embedded practice through the teaching. This extends learning into the home. For some parents written documentation may not be the most effective way of communicating this information, therefore other forms, such as audio or video could be used.
- Schools need to encourage children to take their instruments home.
- The opportunity to perform enabled other teachers, parents and the wider music community to see learning in action. Performance also helped to raise the children's aspirations. For learning, it helped exemplify achievement which others might not have thought possible. These performance were significant milestones which engaged parents in the learning process.

## **Recommendations.**

It is to be hoped that it has been evidenced throughout this report that the OHMI teaching pilot has been successful in supporting and offering children with physical and other educational needs undifferentiated opportunities and participation in music. The support offered by OHMI, teaching and learning approaches employed by the teachers, and the opportunities via performances have demonstrated benefits for the musical and wider educational, social and emotional development for these children.

In order to continue to offer these undifferentiated opportunities, this report makes some recommendations for the wider educational and music sector:

- Development of instruments going forward, recommendations include investigating use of plastic recorders
- The OHMI ensemble was significant for the social and musical development of the children. This ensemble was, however, OHMI specific. Maybe routes into mainstream ensembles might need to be considered.
- Further exploration of Music Medals and their suitability is needed. Are there other forms of accreditation that might be better suited to some of the children? Can OHMI develop their own accreditations which are more tailored to the children's individual needs? This may mean instituting an OHMI progression award, administered by OHMI, or partnering with an external validating body to help with this.
- WCET/Wider Opportunities lessons are going to take place for some of the children in the forthcoming year. This individual approach to lessons, ahead of the main class WCET teaching, would give the child and teacher a head start and so enable them to participate in whole class teaching fully. The suitability of the instruments chosen for these whole class lessons therefore needs careful consideration, so that the children are offered undifferentiated participation.

- The practice diary might be more helpful to parents with videos and photos. Further communication is needed between the school and home.
- Increased knowledge of wider music service activities is needed so that more young people can engage in music.
- The 30 minute lesson durations were significant for learning. This differentiated participation is offered in many learning situations, in particular in exam conditions many children with additional physical or complex learning needs are offered extra time.



Pupils at the end of the Birmingham Pilot, together with the ABRSM's Chief Executive, Michael Elliott  
Photo Credit: John Hipkiss Photography Ltd

## References.

- Arksey, H. & Knight, P. (1999) *Interviewing for social scientists*. London: Sage.
- Bolton, G. (2004) *Reflective practice: Writing and professional development*. London: Sage Publications.
- Cohen, L., Manion, L. & Morrison, K. (2011) *Research Methods in Education*, (7th Edition). London: Routledge.
- Cole, M. & Engeström, Y. (1993) A Cultural-historical approach to distributed cognition. In *Distributed Cognitions*, Salomon, G (Ed) Cambridge: CUP.
- Daniels, H. (2001) *Vygotsky and pedagogy*, London, RoutledgeFalmer.
- Greene, J. C., Benjamin, L. & Goodyear, L. (2001) The merits of mixing methods in evaluation. *Evaluation*, 7(1), pp. 25-44
- Grey, D. (2004) *Doing Research in the Real World*. London: Sage Publications.
- Howe, K. R. (2004). A critique of experimentalism. *Qualitative Inquiry*, 10(1), 42– 61.
- Lave, J. & Wenger, E. (1991) *Situated learning: Legitimate peripheral participation*. Cambridge: Cambridge University Press.
- Mertens, D. M. (2007) Transformative paradigm: Mixed methods and social justice. *Journal of Mixed Methods Research*, 1(3), pp. 212–225.
- Moustakas, C. (1994) 'Phenomenological research methods'. London, Sage.
- Nardi, B. (1996) 'Studying context: A comparison of activity theory, situated action models, and distributed cognition'. In Nardi, B. (Ed), *Context and consciousness: Activity theory and human-computer interaction*, pp. 69-102. Harvard, MIT Press.
- Rasmussen, J. (2001) The Importance of Communication in Teaching: a Systems-Theory Approach to the Scaffolding Metaphor. *Curriculum Studies*, 33 (5) p 569-582.
- Robson, J. (2002) Commentaries and post-beginners' language teaching. In Fitzpatrick, D., Hardwick, L., Ireland, S. & Montserrat, D. (Eds) *Old wine, new bottles: texts for classics in a changed learning environment at university*. Milton Keynes, UK: The Open University, pp. 51–60.
- Robson, J. (2002) 'Real World Research'. Oxford, Blackwell Publishers.
- Salomon, G. (1993) *Distributed Cognitions*, Cambridge: Cambridge University Press.
- Schön, D. (1983) *The Reflective Practitioner*, Aldershot, Hants, Academic Publishing.

Vygotsky, L. S. (1978) *Mind in Society: The Development of Higher Psychological Processes*. Cambridge, Mass: Harvard University Press.