



Moving Music

A pilot multi-arts project with children with Profound and Multiple Disabilities

Technical Report, March 2017 by Dr Julian Knight & Dr Kathryn Mason

1. Background and Rationale

Creative Futures is a multi-arts charity which transforms the lives of vulnerable children through high quality, targeted arts programmes. Our work is delivered by highly skilled and experienced professional artist educators. Each project is uniquely devised to meet the specific needs and priorities of the children or groups taking part.

Moving Music was devised in collaboration with an inner London special school following a number of discussions with the head of creative arts at the school about the power of music and the arts to engage children with severe learning difficulties.

The important role that music plays in the lives of children with profound and multiple disabilities has been well established and acknowledged (Ockelford, Welsh & Zimmerman, 2002). Music and the arts have potential benefits to children with a variety of disabilities, both as an area of learning and life enhancement in their own right, but also for a wider range of developmental factors such as social, emotional, cognitive and motor development (Ockelford, 2000; Trevarthen, 2002). The structure and content of the sessions in the programme described in this report addressed all of these factors, incorporating music, movement, dance and visual art with children with a wide range of disabilities. Engagement has been found to be the best predictor of successful learning for children with profound disabilities (Iovannone et al., 2003). Regardless of the activity, without true engagement and interest from the child no deep learning can take place (Carpenter, 2010). Therefore, we raised funds from BBC Children in Need for a short pilot programme designed to explore whether a multi-disciplinary approach involving music, movement and art could positively impact on children's engagement and self-esteem. The outline of what we delivered, and what we learned from the project, are set out below.

2. Participants

The school allocated 16 participating children aged 5 to 10 years into two groups of 9 and 7 children respectively. Each received a workshop lasting 1 hour on Tuesday mornings, supported by staff from the school. Children at this school have profound and multiple learning difficulties (PMLD). Group 1 children had severe behavioural and learning difficulties including autism, but were not in wheelchairs. Group 2 children had PMLD accompanied by severe motor difficulties and were all in wheelchairs. Both groups represented a range of complex needs.

3. Aims & Outcomes

This 11-week pilot project was designed to explore how a multi-sensory approach including movement, music and art could enhance the engagement of children with a range of profound and multiple learning difficulties. Three specific outcomes were set:

- I. To develop pupils' interaction, communication and inter-personal skills through music and movement.
- II. To enhance pupils' transferable skills such as motor, movement and coordination skills.
- III. To enhance teacher skills and confidence in using music and movement as part of their teaching practice in order to extend the benefits of the project to other children.

4. Programme content

'Moving Music' involved the delivery of 10 workshops lasting an hour with each of the two groups, culminating in an open sharing session for parents. Three artists with relevant experience were selected from Creative Futures' roster of artist educators to deliver the project: Sophie (musician and trainee music therapist), Tania (movement specialist and dance therapist) and Thor (sound artist). After two planning sessions with teachers at the school, which included discussion of the participating children's needs, the artists worked with our Creative Producer to devise a suitable structure and content for the project. Workshops took place at the school during the autumn term 2016.

4.i Typical workshop structure

- Sessions tended to follow the following format:
- Hello song in which each child is greeted musically in turn
- Song involving movement (e.g. Heads, Shoulders, Knees and Toes)
- Themed activity, e.g. using the imagination to create a journey or adventure, e.g. 'journey to space', 'journey on a train', 'self-portraits', 'walking through the jungle'.
- Quiet time to calm down
- Good-bye song

The project took a different path with each of the two groups based on their interests and needs. Work created by the end of the term included a huge canvas painting to which everyone input which was then displayed in the school hall, and a large book in which there was a double page about and by each child (example below):

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4.ii Activities

Here are more examples of the activities which took place during the course of the project:

- A variety of songs: hello songs, good-bye songs, action songs (e.g. 'shake and stop', 'heads shoulders knees and toes') with guitar and/or drum backing.
- Playing instruments: various instruments were available for children to explore including drums, shakers and a keyboard. Soundscapes were created in most sessions using a mix of vocal sounds, instruments and found instruments (i.e. everyday objects used for their sound qualities).
- Movement activities: walking, running, jumping, rolling – often on a 1:1 basis where the physical needs of the child required individual support.
- Art activities: finger painting, ripping paper and card, hand-painting, creating self-portraits.
- Sensory fabrics: e.g. using brightly coloured scarves moving across the children, a large multi-coloured parachute which the children loved being underneath as it billowed about them, glittery paper and balloons too represent stars (etc) in the space journey session.
- Recorded sounds: using pre-recorded sounds and recordings made by participants in the session to underpin further parts of the workshop and to add musical depth and texture to the imaginative stories which themed each session, e.g. jungle sounds.

At many times in each session these different activities would overlay each other, e.g. with music happening during the movement and art activities – so that the environment created was a multi-disciplinary one in which multiple senses were stimulated at once.

5. Evaluation

The evaluation of *Moving Music* followed Creative Futures' Ethical Policy and at the school's request. We engaged a freelance researcher (Dr Kathryn Mason) who observed pupils at four points through the 11-week programme using two tools:

(a) A bespoke evaluation tool devised by Creative Futures to track three areas of behaviour for all pupils: Interaction (engaging with others, interacting, focussing on activities), Physical (gross & fine motor skills), and Communication (engaging in verbal, physical or musical dialogue with another person, expressing ideas/feelings). We scored each area of behaviour from 1 to 4 where 1 = didn't demonstrate these behaviours at all; 2 = fleetingly demonstrated a few of these behaviours; 3 = sustained some of these behaviours sometimes; and 4 = consistently demonstrated these behaviours regularly through the session.

(b) The 'Engagement Profile and Scale' (developed by the Specialist Schools and Academies Trust) which we used for two Case Study children from each group. This tool consists of observations being made on the following 7 indicators of children's engagement during a lesson:-

- 1) **Awareness** (Shows response, consciousness, acknowledgement or recognition)
- 2) **Curiosity** (The need, thirst or desire to explore, know about, learn or make a connection with)
- 3) **Investigation** (Actively trying to find out more within or about an activity or experience)
- 4) **Discovery** ("Light bulb moment": a new or repeated action or experience (planned or by chance) that causes realisation, surprise or excitement etc.)
- 5) **Anticipation** (Shows expectancy or prediction as a result of previous knowledge, experience or skill)
- 6) **Persistence** ("Sticking with it": continued effort (may be in short bursts), perseverance, determination, refusing to give up or let go)
- 7) **Initiation** (A self-directed request, movement or indication, however small, which can be considered to express an intention, want or need)

Children are subsequently given scores on each of the components according to the perceived level of their engagement, ranging from 0-4, where 0 = No focus; 1 = Low and minimal levels – emerging/fleeting; 2 = Partly sustained; 3 = Mostly sustained; 4 = Fully sustained.

The cumulative score for each of the 7 engagement indicators provide a quantitative score for the children's overall engagement during each session.

As some pupils were not present at every session, we did not gain a complete data set. However, we collected enough material to give us a reasonable picture of the project's impact.

In addition to these two methods of tracking the impact on pupils we also asked teachers to complete a feedback questionnaire at the end of the project, and our artists to write short reports from each workshop. We closed the project with a project review discussion involving all three artists, the evaluator, and our project managers.

6. Impact

To understand the impact of this short pilot project we have drawn together information from our two methods of evaluation, plus feedback from teachers and our artists. Below is a description of the impact against each of the outcomes listed in (2) above, together with two short Case Studies.

6.i Pupils' interaction, communication and inter-personal skills

Overall, differences were seen in communication, with increased vocalisation and frequency of eye contact notably improving. This was due to an increase in the children's trust and familiarity with the adults in the room. When 1:1 interaction between our artists and children occurred, there was (perhaps inevitably) greater engagement, interaction and communication. For many of the children, when 1:1 interaction stopped, their engagement waned.

We also noticed that the level of engagement by the school staff member supporting each child had a bearing on the level of engagement demonstrated by the children: where the staff member was engaged and actively supporting a child on a 1:1 basis to take part in the activities, the child's level of interaction tended to improve more than in those cases where this support was less available.

"F" was observed smiling when it was her turn to be welcomed during the "hello song". She enjoyed the session and was laughing when running and jumping around the room with "L" and one of the artists. This is in contrast to earlier sessions when her engagement was more fleeting. She appeared to engage in activities with the artists for a longer period of time (evaluator notes).

"M" was extremely motivated to join in with the parachute game, and appeared to love lying underneath it, experiencing the different colours and sensations. This behaviour was in contrast to previous sessions where he needed a lot of encouragement to engage in group activities (evaluator notes).

For some children, whose needs were noticeably more complex, or whose attendance was less frequent, little or no change was detected. E.g., "Fr", due to his condition, remained fairly consistently at level 1 in Interaction and Communication.

In terms of our bespoke evaluation tool, half of pupils improved by 1 step in 'Interaction' and in 'Communicating' across the 11 weeks, and two pupils improved by 2 steps. Most children were in level 1 or 2 for both 'Interaction' and 'Communication' at the start, with a handful of children in level 3. At the end of the project, most children had either moved up to or sustained level 2 in Interaction, with two children moving from level 3 to 4. In Communication, the same two children moved from level 3 to 4, and the majority of the others remained at level 2.

"L" was an absolute star - engaging for an extended period of time, mirroring, following a sequence of instructions and clearly enjoying her time - she was beaming. The spontaneity in some of the ways that she interacted was great" (teacher).

6.ii Pupils' transferable skills such as motor, movement and coordination skills.

With the more mobile of the two groups, we focussed on fairly active, physical activities throughout many of the sessions, using the workshop space to move, jump, roll and explore aided by a musical beat. At other times fine motor skills were encouraged e.g. through tapping drums or rattling shakers. A number of the children were particularly interested in the piano keyboard and would explore this for considerable time. One child sustained his engagement at this activity throughout most of one of the sessions, and seemed very interested in the link between his movements and the emerging sounds. He was observed smiling when louder notes were played.

We noticed that some children continued with a physical activity unsupported for greater amounts of time and demonstrated greater independence as the project progressed.

Some of the sessions involved paint and cardboard – e.g. they made a cardboard spaceship for their workshop about a journey to space, and glittery paper for stars. Again, these activities which engaged the children in a multi-sensory way were very effective in terms of engagement.

One child particularly loved ripping paper and card, so we incorporated this activity into a workshop, encouraging him to do this in a creative way as part of a collective activity to make portraits about each child, and exploring the sounds of the ripping paper musically.

All the children were entranced by the huge parachute which was used as a canopy above them for some of the activities. Its bright colours and the sensation it created as it swept and billowed up and down and around them noticeably engaged the children, brought them together as a group, and also soothed them. Other fabrics were used too, and the children always responded well to the touch of these.

Children in the second group, whose mobility is significantly less (all are in wheelchairs) also responded very well to paint, colours and fabrics. They enjoyed the sensation of paint on their fingers, and made pictures with it. Leaves were used in one session to create a collage and the children enjoyed the sensation of leaves falling on them. They responded to music with finger tapping and played shakers. One child came out of her chair in one of the sessions to explore movement on the floor supported by Tania, the dance leader.

Our bespoke evaluation tool placed children in Group 1 at level 2, 3 or 4 at the start of the project, i.e. they demonstrated these behaviours fleetingly, sometimes or in a sustained way through the session. Most of the children improved over the course of the project, although the improvement was not necessarily linear.

*“S” stayed standing for almost all the session and he danced to the rhythm when I held him
(artist session notes)*



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Children in Group 2 displayed less change and their scores remained constant around 1 or 2 (no, or fleeting, demonstration of these behaviours). However, some change was noted: “Y” responded physically and vocally to a beat in an early session (when his overall engagement was at level 2); and in a later session was reported to wave and tap his hands during activities and when excited, and his engagement was more sustained (level 3).

“It was great to see “T” engaging with the activities in his own way. He reached out to me a few times asking to be lifted and then he also approached Thor asking for another lift and hug. He is much calmer and appears to be very interested in what we are doing.” (artist session notes)

A noted achievement was “K”, out of her chair, dancing with her arms as the musicians played a free improvisation. She really seemed to enjoy sitting on the floor with Tania’s support.

6.iii Teacher skills and confidence in using music and movement as part of their teaching practice

This project divided the school staff who were involved. Some were engaged in the activities, and supported children’s participation in as active a way as possible, whereas others appeared less engaged, and infrequently modelled activities with their children.

“if anything, it encouraged the bad behaviour we try to reduce in class” (teacher)

There was a clear correlation between those children who engaged and progressed most, and those whose support staff were also engaged.

A lack of consistency in which staff were present at each session also made it harder for our artists to get to know the group and for their approach to be understood and fully supported.

We received feedback from 8 staff who responded to our questionnaire which asked them to score from 1 (no effect) to 4 (profound effect) the impacts of the project on pupils and on themselves. Respondents were evenly divided between those who supported the project and those who were less enthusiastic.

In terms of impact on pupils, half of teachers responded with either 3 or 4 out of 4 that the project had had a positive impact on pupils’ communication skills, interaction with others, fine motor and co-ordination skills and engagement. 3 teachers also said they saw an improvement in pupils’ well-being and self-confidence outside the workshops. Memorable moments in the project included

“children being more engaged and self-esteem improved” (teacher).

Three teachers said that the project had had a profound impact (scoring 4 out of 4) on their understanding of music’s ability to improve the level of engagement and communication skills of pupils. In addition, three teachers scored 3 out of 4 that the project had improved their confidence to deliver expressive music and movement activities aimed at supporting pupils’ learning and engagement. Four said that they would use some of the activities (especially sensory activities and songs) in their own teaching practice in future, and two more indicated that they might.



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Although there were some staff who were not swayed by the project, there was a positive impact on others, and most could see some benefit to some part of the process. It was clear to our artists which staff were engaged and which were not as those who were engaged became actively involved in the sessions and co-led the activities with the artists, thus modelling and shaping the activities for the individual children.

6.iv Other observed impacts

Aside from the outcomes set for the project, we noticed that many of the children were able to experience sensory activity which drew them in and appeared to fascinate and engage them. This may have been because some sensations were new, or presented in a new way. It felt as though there was a sense of discovery which our multi-sensory approach facilitated. For example, many children enjoyed the chance to explore certain instruments through touch and sound (e.g. the large gong); and the effect of the large multi-coloured parachute cascading over them.

This reflects back to our work in mainstream early years settings where a multi-sensory approach is also particularly effective. As every child will engage in a slightly different way, this approach helps to ensure that everyone can participate in the experience the activity offers, and derive their own benefit from it.

This is an approach which we will be seeking to explore and refine further in these contexts, and which will form a theme in a resource or toolkit which we will be producing from our work in this school and other SEN settings in due course.

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6.v Case Studies

Case Study 1: “T”

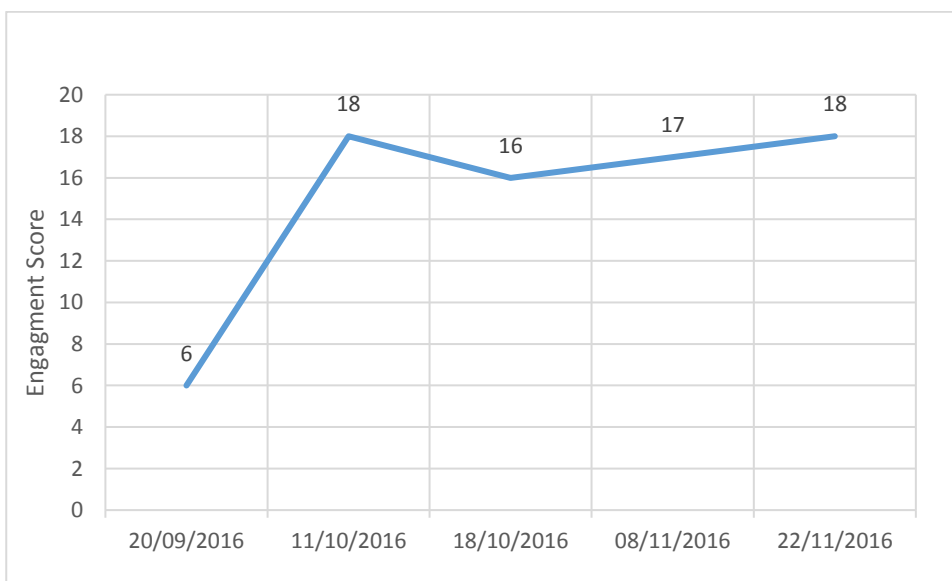
“T”, one of our Case Studies, was tracked using the Engagement Scale. His engagement rating at the start of the project was 6/28 (defined as ‘emerging/fleeting’), whereas his engagement rating at the end of the project was 18/28 (between ‘partly sustained’ and ‘mostly sustained’). “T wasn't engaging in a conventional sense but he clearly was seeking out and enjoying the interactions. For one of our ASD students to be spontaneously engaging and outwardly enjoying their experiences was heartening to see and are great indicators for his future learning” (teacher).

Notes from first session observation: When T arrived to the session he appeared extremely distracted and somewhat distressed. This may be because the session was new to him/a change from his usual routine, and the adults in the room were not yet familiar to him. He walked around the room and yelled when adults tried to engage him in the activities. He was extremely restless at first. However, during the later stages of the session he lay down voluntarily for a cloth to be placed over him. This sensory stimulation appeared to hold his focus for a short time.

Notes from final session observation: T was calm and happy at the beginning of the session... He responded/ stopped what he was doing when his name was called and he was invited to take part in a joint 1:1 activity with one of the artists. He observed others’ activities and approached them to see what they were doing. During this session, he was observed vocalising and reaching his arms out towards adults when he wanted to be held/picked up.

Graph 1 shows the development of T’s engagement with the sessions over the five observed time-points.

Graph 1: Engagement Scores for “T” over five observation points





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The following data shows T's scores in more detail for the various elements of engagement over the 5 observed sessions. The data shows T's engagement moves from "emerging/fleeting" during the first session, to being maintained at "partly sustained – approaching mostly sustained" over subsequent sessions.

Session Date	Awareness	Curiosity	Investigation	Discovery	Anticipation	Initiation	Persistence	Total Engagement Score
20/09/2016	1	1	1	0	2	1	0	6
11/10/2016	3	1	1	3	4	3	3	18
18/10/2016	3	2	3	0	3	2	3	16
08/11/2016	3	2	3	2	3	2	2	17
22/11/2016	2	3	3	2	3	3	2	18

Key for scoring	
0	No focus
1	Low and minimal levels emerging/fleeting
2	Partly sustained
3	Mostly sustained
4	Fully sustained

No Focus		Emerging / fleeting					Partly sustained					Mostly sustained					Fully sustained											
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28

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Case Study 2: “R”

“R” is a 6 year old girl who requires 1:1 support and uses a specialised seating system at school. She is reported by her school to be non-verbal and communicates her needs and feelings primarily through vocalisations and eye-gaze. She is very distractible and has a short attention span.

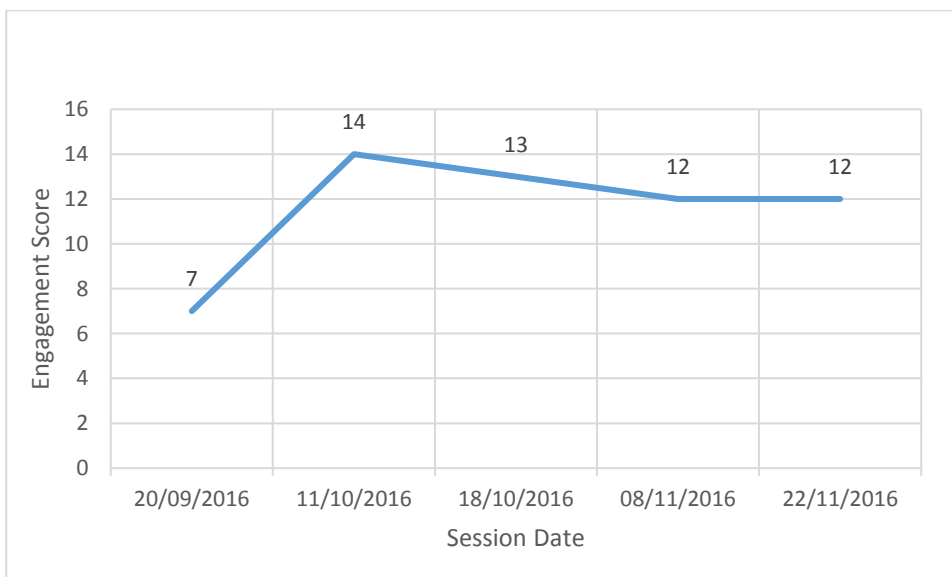
In the first session she was observed to vocalise and to respond excitedly to 1:1 interaction during the “hello song” with the session leader. Songs sung in a whisper also appeared to calm her when she became agitated. Her eye gaze was drawn to the glockenspiel when it was played, and she liked exploring the feel of the large metal gong and tapping it.

In the next observed session three weeks later R was very unsettled and was biting her hand. However, she calmed down to the sounds of the guitar and then gently clapped along and smiled. She smiled when her name was sung in the “hello song”, and tapped along independently to the rhythm of an African song.

In later sessions R has become more at ease with the artists as she has got to know them, and anticipates new activities when the artists approach her. She seems to remember activities from the previous week, and smiles in anticipation. She enjoyed exploring new physical sensations when she was brought out of her chair to interact physically with our dance artist. She also enjoyed the shifting light and colours of the large parachute, and demonstrated a particularly sustained level of engagement while exploring the paint in a finger-painting activity.

In terms of her engagement across the project using the ‘Engagement Scale’, R moved from a score of 7 out of 28 (fleeting engagement) to 13/14 (partly sustained). This shift occurred early in the project – in the first few weeks – and was then observed to be sustained at that level as shown in graph 2, below.

Graph 2: Engagement scores for “R” over five observation points





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“R”

The following data details R’s scores for the various elements of engagement over the 5 observed sessions. The data shows R’s engagement moves from “emerging/fleeting” during the first session, to being maintained at “partly sustained” over subsequent sessions.

Session Date	Awareness	Curiosity	Investigation	Discovery	Anticipation	Initiation	Persistence	Total Engagement Score
20/09/2016	1	1	2	1	1	1	0	7
11/10/2016	3	2	3	2	2	1	1	14
18/10/2016	3	2	2	3	2	1	0	13
08/11/2016	2	2	1	2	2	2	1	12
22/11/2016	2	2	2	1	2	2	1	12

Key for scoring	
0	No focus
1	Low and minimal levels emerging/fleeting
2	Partly sustained
3	Mostly sustained
4	Fully sustained

No Focus	Emerging / fleeting							Partly sustained							Mostly sustained							Fully sustained						
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28

7. Learning

We learned much from this short project. Key learning points:

- It takes time, especially with children with special educational needs, to build trust between artists and children, and between artists and staff, during a weekly project, so one-term is a very short time-frame to achieve any noticeable progression against objectives. We expect two or three terms would see significantly greater impact.
- A multi-sensory approach is particularly engaging for PMLD children.
- A thorough understanding of the needs of each participating child, the goals and expectations of their participation, and the level of support they require, is needed by the artistic team prior to the project's start in order for them to plan activities which are tailored to the children's needs.
- A full briefing with all the school's staff involved in the project, to engage them in the project's aims, ambitions and methodology, is essential before the project starts. Having senior leadership team support is also crucial, but if they are not directly involved in project delivery this does not replace the need to engage with the staff who will actually be involved.
- Ideally, 30 minutes of planning time, and a further 30 minutes reflection time involving artists and teachers will frame delivery of each workshop – where teacher schedules allow. (In practical terms this is often difficult to achieve!)
- A regular workshop format helps children to feel comfortable, engaged and secure; e.g. following the same pattern of activities every week.
- Using the same room for the activities each week also helps to form a secure environment for the children, and helps them settle in to a new project more quickly than if the room is often changed.

The lack of engagement by some staff was disappointing but provided us with some valuable learning. Feedback from some staff stated that “there was a lack of structure to the workshops, and that activities were not sufficiently tailored to the individual needs of pupils”. Although this was not a view held by all the staff involved – many of whom found the activities to be highly effective and engaging for their children – this feedback will be taken on board for future projects, and is also supported by reflections from our artists that more planning time would have been useful, both on a session to session basis for the artists, and with teachers before the project started. More time for the artists to develop a better understanding of the precise needs of every child involved, and the interests and expertise of the teachers, before the project started would have been helpful: our two pre-project planning sessions at the school were not sufficient.

A model we have found effective on other projects has been to have 30 minutes planning time before each session with teachers, and a similar amount of reflection time after each session – however the needs of the pupils, combined with logistics of moving the pupils around the school site, made this approach impossible on this occasion.

8. Conclusions & next steps

Moving Music presented a valuable opportunity for Creative Futures to pilot its creative multi-disciplinary approach in a special school with PMLD pupils aged 5-10 years. Although it was a short project, we saw some positive outcomes, engagement and enjoyment from almost all of the 16 pupils who took part. Many of the teachers we worked with found the project to have a positive impact on pupil engagement, self-esteem and communication skills; and also found that it enhanced their own understanding of the power of the arts to enhance children's development and their confidence to deliver creative activities.

"It was great to see the project last week and I've had a look through the 'book' and you get a real sense of the students. It was great to watch the students' interactions... It was great to hear the stories of how "F" had grown in confidence in the space and subsequently the ability to engage and take risks. It became apparent that it was a flexible 'space' and that it allowed for expression and autonomy" (head of creative arts at the school).

Overall, *Moving Music* was a positive project for Creative Futures and provided useful learning which will feed in to other current projects with hearing impaired pupils as well as providing a useful platform on which to build further longer-term programmes for PMLD pupils.

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