

**Neil Thomas - Music Teacher**

**Beverley School for Children with Autism**

## **Impact of The Digital Score on Middlesbrough Open Orchestra students**

### **Background**

Middlesbrough Open Orchestra is an accessible orchestra / ensemble made up of students from two special schools within the Tees Valley area. The Orchestra is a partnership between Beverley School, a school for children with autism, Priory Woods School, a generic special school and Music which offers musical inclusion throughout Middlesbrough and is based at Middlesbrough Town Hall.

The members of the orchestra are a variety of learning difficulties, disabilities and conditions and cover a wide range of academic and musical abilities. Students are selected to take part in the orchestra based on their enthusiasm for music and musical engagement, their musical ability or a mixture of both. The Orchestra is in its fifth year with a mixture of students who have remained part of the orchestra for its entirety and those that have joined at various points since the orchestra's conception. A few of the students only joined the orchestra within the last term prior to the Digital Score performance.

The project was broken into two main areas; composition and performance. For some pupils, their main involvement was performance and their interaction with the completed digital score piece. For others, their involvement covered both composition and performance.

From observations over the course of the project, the following areas were felt to have been impacted as a result of the project

### **Musical development**

The imagery of the digital score offered students an aid, as with a conventional score, to direct them on what they played at any given time. This appeared true for all students who use the visuals throughout the rehearsals and the final performance. The different sections of film used gave a clear indication of moving to new movements and the use of changing colours on the visuals was particularly useful helping students know when they need to change notes/chords.

For the vast majority of students in Middlesbrough Open Orchestra, reading traditional notation is difficult for them to access and interpret due to their cognitive ability. Therefore, a traditional score is impossible to use with this ensemble and memory of patterns is normally utilised. The pictorial nature of the score allowed the students to rely less on memory, giving them a clear map of where the music was going.

Students from both schools have had experience of using accessible notation such as Figurenotes, however, this was the first time they had used a score collectively. I felt that as

a result of the digital score students were more able to engage with the material in a more relaxed manner. This led to a better musical outcome both collectively and for individual students.

The students felt they had made musical progress through the project. One said that he felt he had improved his pitch and developed the use of harmonics on the double bass. Another said that they had 'got better at playing the piano'. One student felt that they had improved their technique on cello and another said that they could 'blow a note on saxophone for longer'. The overall feeling from students was that they had improved as a result of taking part in the project. They really enjoyed the visual nature of the project.

### **Creativity and imaginative development**

At Beverley School, a selection of 5 students took part in smaller scale sessions to develop the piece. Initially creative cards and rapid prototyping were used to elicit musical ideas and themes. The students at Beverley found this process difficult to engage in. With encouragement, some students did offer ideas and over time became more engaged. Others found this way of working too difficult and needed to be offered ideas. I think this way of working was too abstract for many of our young people with autism. Having said that, some ideas did come from this and an approach to improvising and developing ideas was created, giving pupils a basis to develop their creative skills later in the project.

Once Layla Curtis's films were introduced, then the majority of the group started to offer more suggestions and musical ideas. The one pupil who found improvising difficult was able to offer harmonic responses to the musical ideas put forward. The films offered a more concrete stimulus for the students to work with and improvise ideas in response to what they saw.

Students in this cohort became more confident in developing ideas and offering them to the group. Their ability to improvise improved in all the students in this group. The degree to which students developed their improvisation skills was dependent on how they normally work. One student who found improvising difficult did make progress in his ability to improvise, particularly in response to the ideas of others.

Students began to use their instruments in new ways such as hitting the body of the violin or double bass. This allowed students to explore a wider range of sounds available than they would traditionally use. The double bass player started to use harmonics and improvised using this new technique.

The improvisations led to the composition of each movement with the element of improvisation woven in.

When questioned, all the students had a strong sense that they had developed their creative and improvisation skills. Some students expressed that they had not enjoyed the sessions at first and found it 'difficult'. They said that they came to enjoy the sessions when their skills and confidence increased.

### **Social interactions, Social coherence and collaborative working.**

As the orchestra was well established and the students were used to spending their time rehearsing on a Friday afternoon, I did not think that the interactions between students improved greatly during the usual rehearsal sessions. However, there was an increase in social interactions during the day sessions when there was more down time to engage and interact with others. Some students interacted across schools and others interacted within their own school groups. For some, they remained in their usual isolated state with little to no interaction with others.

The difference in social interaction came in the creative improvisation / composition group which took place on a Thursday afternoon. The session took place across lunchtime and early afternoon which required pupils to go to lunch earlier than they would normally. After the first few sessions, students took it upon themselves to collect the group together and go to the dining room as a collective. There was an increase in social interaction and the group appeared to feel close knit in a cohesive group. Social interactions continued when they arrived in the music room and often needed their focus to be drawn away from their social interactions to the task at hand. Once the session had started, the students took the cue that they needed to focus. Interestingly their conversations centred around music, instruments and often the project.

For some there was marked improvement in their willingness to communicate with their peers and their confidence in doing so increased across the sessions. The group increased their eye contact with each other during sessions in order to increase their communication when playing.

Students said that they had enjoyed working with their friends and spending time with them. One said that he had enjoyed the way the group had 'supported each other'. Another said that he 'usually composes by himself but had to learn to compose with other people'.

The whole orchestra came together as a cohesive group to work on and develop Journey Through a Changing World. Cooperation between students was excellent and as was their cooperation with Ben (Orchestra Leader) in a common goal.

### **Confidence, self-esteem and emotional development**

There was a clear improvement in the confidence of those taking part in the Thursday afternoon composition session. All five students showed greater confidence in verbalising their ideas to the group. This group reported feeling good about what they had achieved and the progress they had made over the sessions. They certainly became more confident in improvising and using their instruments in response to the stimulus.

The increase in self-esteem was particularly noted in the saxophone player. Previously he would shut down and stop playing if he perceived he had done something wrong. He became more accepting of his mistakes and more willing to try something new. This change

was not only noted with his saxophone playing but also in the broad school curriculum. The young man's body language was more open and he stood taller. He reported feeling 'proud' of his achievements.

The whole orchestra felt a real sense of achievement following the final performance at Middlesbrough Town Hall. Prior to the performance students were excited to perform and wanted to do well. There was a sense of achievement following the performance and students felt proud of themselves and the orchestra. Students said that they felt 'happy' that they had been part of the project. This was evident in their smiles and engagement when talking about their involvement in the project. There was an excitement and buzz around the performance.

### **Cognitive development**

It is difficult to comment on the cognitive development that may have taken place. However, simply working in different ways and using different modalities can only be good for cognitive development. The increase in confidence and self esteem help to develop cognition through self-belief and a willingness to persevere, particularly when things go wrong. This was particularly evident in the saxophonist whose teacher were reporting an increase in his ability to be challenged and accept imperfection. This led to greater opportunities to develop and learn within the wider curriculum.

Some of the final comments from pupils when asked what they thought of the project.

- I think it was brilliant and calming. moving from sound to another. It was mind blowing. Lots hard work leading up to it. It was masterpiece.
- Absolutely amazed. Excited. Parents came to see it. They gave 10/10.
- I felt good. Enjoyed listening to the music and other people's parts.
- It was interesting. Very different to all the other performances.
- I loved it.
- Can we do it again. It was great.

### **Conclusion**

The digital score was a great success for Middlesbrough Open Orchestra. The students gained so much from taking part across a range of areas and clearly enjoyed the experience. Staff developed new ideas, way of working and using digital scores to enhance performance, making a score accessible to all participants. The project has left a legacy which the orchestra can use going forward to enhance its outcomes for its members.

Neil Thomas

Beverley School