



Project: My Science Fair 2019

A proposal for Bradford on Avon Area Board

The continuation and development of an educational project aimed at inspiring engagement in music and science outside of the classroom through exciting workshops, experiments and live performances

Summary

Returning for its seventh year, My Science Fair is a day of performances, workshops and presentations aimed at engaging young people in the worlds of music and science. Attended by up to 400 participants, including children and their families, this free event aims to excite and stimulate young minds by providing outstanding experiences, in the form of displays, concerts and hands-on exhibitions. Pupils from local schools are also encouraged to take part in our Project Exhibition, in which they design and complete a project or experiment, create a display for the itself fair, and to present it to judges as a part of a competition.

The fair has been enormously successful in previous years, incorporating large numbers of children and bringing together high-quality musical and scientific experiences. We aim to continue to build on this platform, looking to maximise engagement and give attendees the opportunity to take part in more experiences on the day.



We would like to thank Bradford on Avon Area Board for their generous funding of this project in 2013 and their support of Wiltshire Music Centre's Creative Learning Programme. We are now fundraising for this valuable project to take place in March 2019.

About Wiltshire Music Centre

Wiltshire Music Centre is currently celebrating its 20th Anniversary. Over the past twenty years Wiltshire Music Centre has built a reputation as a professional concert hall of exceptional quality rooted in community participation and involvement. The Centre attracts world-renowned performers across the classical, world, contemporary, jazz and folk genres, including The Orchestra of the Age of Enlightenment, Jazz pianist Gwilym Simcock, Professor of Piano at the Royal Academy of Music, Joanna MacGregor OBE, folk group Calan and Ghanaian master drummers Kakatsitsi, to present over 150 concerts a year, involving more than 1,000 professional, community and young musicians. The Centre provides a permanent home for local orchestras, choirs and community groups, and works extensively with local schools and special needs groups through a varied Creative Learning Programme in Wiltshire and beyond. Interactive family concerts offer thousands of children and their families, many who live in rural isolation or with a low income, the opportunity to attend concerts at an

affordable price. Over 800 young musicians rehearse here weekly, with 60,000 people using the Centre each year. The Centre works strategically with key local and national partners to deliver an exemplary programme of concerts, education and community work which encompasses all ages, abilities and backgrounds. It is a first-class 300 seat concert hall with a superb acoustic and 9 workshop and teaching spaces. There is no provision like it in the area.

Project Detail

- **My Science Fair Event (March 2019):** My Science Fair is a day-long free community event which provides an educational, fun and inspiring opportunity for young people to engage in scientific exploration and music-making. The fair provides an important opportunity to enhance children's' knowledge of these subjects through high quality, interactive activities outside of the classroom, led by professional musicians and scientists from leading universities and institutions. Activity leaders and panellists for My Science Fair 2018 included professors from the University of Bath and Durham University, engineers from Anthony Best Dynamics and top musicians, Adriano Adewale and David Garcia.

The programme will include interactive workshops, talks, displays and performances, including a Free Family Concert by professional visiting artists. In March 2018 this was delivered by award-winning ensemble, Palisander, who presented an interactive live music event with an amazing array of recorders from 6 inches to 6 feet tall, which was enjoyed by all.



- **The My Science Fair Competition:** Between November 2018 and March 2019 local school children aged 5-11 will research, design and carry out their own hands-on, investigative science experiments on music and science topics to present at the Fair. Children are engaged in science not just as a school subject, but as an interactive experience which stretches their imagination and understanding. They learn how to present their projects, research, evaluate and talk to others about their work. This process provides an independent learning experience, whereby children learn the value of scientific method, literature review and data collection, as well as an opportunity for children to realise the importance of making mistakes and why they happened. Children can present their experiments at the Fair, where they are judged in their year groups by scientists who volunteer their time to talk to each child individually about their project.



Examples of last year's (2018) projects include:

- 'How can I make music with water?'
- 'Why do fidget spinners make different sounds on different surfaces?'
- "What effect does colour have on memory?"

Need for My Science Fair 2019

There is no other opportunity like My Science Fair in the area, which offers young people the opportunity to take part in a completely free day of fun scientific and musical activities, packed with learning opportunities. It is an educational, fun, inspiring opportunity for young people and their families, many who live in rural isolation or are from forces families.

The project is also focused heavily on encouraging community cohesion and involvement across all ages and abilities. For many children, it will be the first time they have ever designed and presented their own experiment, programmed their own robot, seen a live chemistry demonstration, or heard a world-class live ensemble. Children will feel a sense of ownership of the projects that they create and present, gain a newly found confidence to work independently and develop a richer understanding of scientific method and ways they can explore their creative curiosities.

Musical exposure and activity in young people is recognised to help numeracy skills; perceptual, language and literacy skills; personal and social development, general attainment, physical development, health and wellbeing (Hallam, 2010). This subsequently leads to improved performance in other subjects across the curriculum (DCMS, 2011).

The project will also address a widely recognised need for audience development within the arts not only in the South West but nationally, by providing high-quality interactive performances aimed at young people. We are committed to fundraising to keep these free for the young people taking part, and all workshops are designed to be appropriate for a wide variety of young age groups. It is increasingly important that we encourage more young people to engage with live music and the arts to enhance their wellbeing and education.

Aims & Objectives

- to provide high quality, engaging, educational opportunities for 400 children and their families, many of whom are rurally isolated or from low-income backgrounds
- to spark an active interest in science and music in children outside of the classroom
- to enable intergenerational exchange and bring the community closer via open access workshops
- to encourage children to discover the rewarding nature of scientific exploration through their own experiments, closely linked to the National Curriculum, and share their findings
- to inspire and enhance the wellbeing of children through new activities, and a free family day out unlike any else in the area.

Outcomes

Children and their families will:

- be inspired and motivated by their experiences to continue their exploration of science and music, both inside and outside of the classroom
- have gained valuable experience of independent thinking and learning
- have a deeper understanding of the cross-curricular links between science and music
- want to participate and attend future My Science Fairs and educational events at WMC.

“The projects are mind-blowing. It’s amazing to see how children so young can come up with lovely ideas and projects” Parent

“They really understood the work...we challenged them with questions they might not have thought about and they came back with brilliant answers” Judge

Monitoring and Evaluation

Throughout the lead up to the fair we will keep accurate records of data to aid with evaluation. We will ask those pupils who are designing a science experiment to answer a short series of baseline questions in order to assess their prior experience of science activities outside the classroom. On the day of the fair we will create displays which encourage those attending to give their feedback in a creative way, so as to be inclusive for people of all ages and abilities. We will also have volunteers on the day to take feedback in person. Furthermore, all participants will be asked to complete a questionnaire during or post event in which we will gather more in-depth feedback to evidence whether the project achieved its stated aims.

Budget

Programme Activity	Description	£	£ Total
Scientist and Music fees	<i>Fees for visiting professionals to perform, lead workshops and judge the competition.</i>	3,000	
Travel and refreshments	<i>Travel and refreshment costs for visiting musicians and scientists.</i>	300	
Venue Hire	<i>Including Concert Manager</i>	1,091	
Children's Prizes and Science Bags	<i>Prizes for the competition and goody bags for young people to take home.</i>	400	
Marketing costs	<i>Including production of flyers and information for competition entries</i>	650	
Subtotal			6,041
Management fee (20%)	<i>Applied to all projects and programmes</i>	1,208	
Total expenditure:			7,249

Funding request

The total cost of the My Science Fair 2019 is £7,249. We believe that the Fair fits well with the remit of Bradford on Avon Area Board to support education, arts and culture events within North Wiltshire communities, because it brings leading scientists and world-class musicians together to run hands-on, educational workshops for children and their families, which are all free to access.

We would be most grateful if the Trustees would consider supporting the project with a grant of £2,500. We currently have outstanding applications totalling £3,500, and continue to make approaches to charitable trusts, but if we do not raise the shortfall, we will have to reduce the number of workshops on offer to fit the funding available. Thank you.

If you should require any further information to support our application, please don't hesitate to contact Annabel Green, Head of Development and Communications:

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